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**V-71 ENGINES**

**DETROIT DIESEL**

**PARTS BOOK**

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# **PARTS BOOK**

**V-71 ENGINES**

**DETROIT DIESEL ENGINE DIVISION**

**GENERAL MOTORS CORPORATION**

**DETROIT 28, MICHIGAN**



Your Series 71 Diesel engine was manufactured by Detroit Diesel Engine Division. The finest quality of material selected through years of research and experience have been combined with precision workmanship and careful inspection to provide you with many hours of dependable trouble-free operation.

This parts book has been prepared as an aid to you

in determining parts which may be required in the maintenance of your engine. All parts listed herein are "Factory Engineered Parts" and are manufactured to the same precision standards as the original equipment.

For your own protection, always insist on GM Diesel "Factory Engineered Parts" for your engine.

### HOW TO LOCATE PARTS

Parts may readily be located in this book by the following method. Refer to the Group Index on page 4 and determine the group in which the desired part appears and the page on which the group is shown. Numerous illustrations are included in this publication to further aid you in identifying parts.

The Alphabetical Index in the rear of the book lists all major parts alphabetically, by noun name, and the page on which the part is shown. This may be used as an alternate to the above method.

UNIT No. _____		RATED HP _____ @ _____		CUSTOMER'S NAME _____	
MODEL No. _____		CONT. HP _____ @ _____		ADDRESS _____	
APPLICATION _____		MAX. NO LOAD RPM _____		ENGINE LOCATION _____	

EQUIPMENT	TYPE	EQUIPMENT	TYPE	EQUIPMENT	TYPE
Engine Base _____		Water Bypass Tube _____		Accessory Drive _____	
Engine Lifter Brkt. _____		Thermostat _____		Battery Chrg. Generator _____	
Flywheel Housing _____		Water Filter _____		Starter _____	
Vibration Damper _____		Exhaust Manifold _____		Hyd. Starter Acces. _____	
Flywheel _____		Air Cleaner or Silencer _____		Starting Aid _____	
Flywheel Hsg. Adptr. _____		Fuel Pump _____		Air Heater _____	
Oil Pan _____		Injector _____		Marine Gear _____	
Oil Pump _____		Blower _____		Torque Converter _____	
Oil Distribution _____		Blower Drive Shaft _____		Torque Converter Lines _____	
Dipstick _____		Turbocharger _____		Gear Box _____	
Oil Filler Tube _____		Fuel Filter _____		Muffler & Conn. _____	
Oil Cooler _____		Fuel Lines _____		Engine Hood _____	
Oil Filter _____		Air Inlet Housing _____		Wiring Harness _____	
Oil Lines _____		Alarm or Shutoff _____		Instruments _____	
Ventilating System _____		Throttle Controls _____		Tach. Drive _____	
Crankshaft Cover _____		Injector Controls _____		Radiator _____	
Balance Wgt. Cover _____		Governor _____		Heat Ex. or Keel Cooling _____	
Fan _____		Engine Mounts _____		Raw Water Pump _____	
Crankshaft Pulley _____		Power Take-off _____		Bilge Pump _____	
Crankshaft Pulley Belt _____		Vacuum Pump _____		Power Generator _____	
Fan Shroud _____		Hydraulic Pump _____		Control Cabinet _____	
Water Connections _____		Air Compressor _____			
Water Pump Cover _____		Camshaft & Gear Train _____			
Water Manifold _____		Rocker Cover _____			



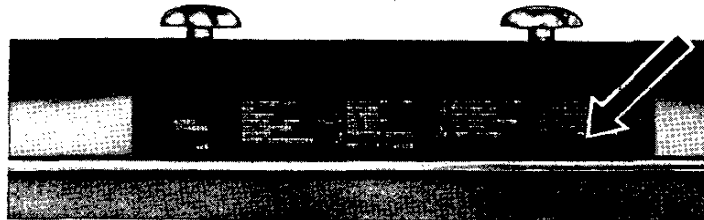
## HOW TO ORDER PARTS

All parts orders should be placed with your nearest GM Diesel distributor or dealer. Do not place orders directly with the factory.

Record the Engine Option Plate information on page 2 for handy reference. Your GM Diesel distributor or dealer has a record of this information and by

Always give the model and unit number of your engine. This is stamped on the Option Plate on the rocker cover on your engine; if a type number is shown covering the equipment required, be sure to include this number on your order.

The Option Plate (shown here) on your engine is an exclusive GM Diesel feature. It lists any special equipment which may be on your engine and facilitates locating the required replacement part for your engine.



furnishing him with the type number shown he can properly interpret your requirements.

## MODEL DESCRIPTION CHART

7 0 8 2 - 7 2 0 1

SERIES 71 V ENGINES	NUMBER OF CYLINDERS	APPLICATION DESIGNATION (see below)	BASIC ENGINE ARRANGEMENT (see below)	DESIGN VARIATION (see below)	SPECIFIC MODEL NUMBER
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### APPLICATION DESIGNATION:

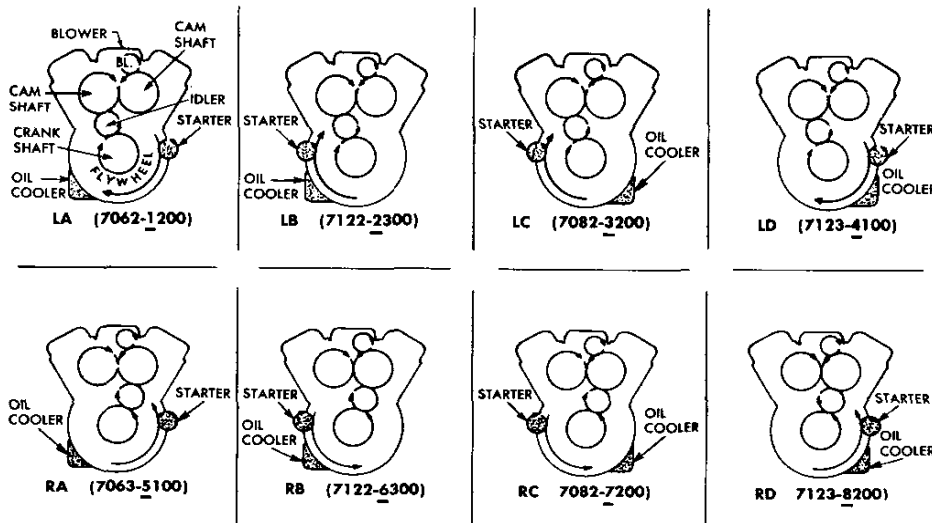
7082-7200	MARINE
7083-7200	INDUSTRIAL F-F
7084-7200	POWER-BASE
7085-7200	GENERATOR
7087-7200	AUTOMOTIVE F-F

### DESIGN VARIATION:

7082-7100	2 VALVE HEAD
7082-7200	4 VALVE HEAD

### BASIC ENGINE ARRANGEMENTS:

Rotation: L (left) and R (right) designates rotation viewed from the front of the engine.  
Cylinder Bank: Left and right cylinder banks are determined from rear of engine.



ALL ABOVE VIEWS FROM REAR OF ENGINE



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## ABBREVIATIONS

AC.....AC Spark Plug Division	expan.....expansion	mtd. ....mounted
adj.....adjustable	fl.....flared or flat	mtg.....mounting
adptr. ....adaptor	flex.....flexible	no. ....number
amp. ....ampere	fig. ....figure	O.D. ....outside diameter
AR.....as required	fil. ....fillister	O.S. ....oversize
assy. ....assembly	gen. ....generator	press. ....pressure
bal. ....balancer	G.M. ....General Motors	pt. ....point
batt. ....battery	gov. ....governor	P.T. ....pipe thread
B.C. ....bolt circle	hd. ....head	PTO ....power take-off
brkt. ....bracket	hdls. ....headless	rad. ....radiator
br .....brass	H.E. ....heat exchanger	rd. ....round
brg. ....bearing	hex. ....hexagon	red. ....reducing or reduction
CCW.....counter clockwise	HP .....horsepower	R.H. ....right hand
CFM.....cubic feet per minute	hsg. ....housing	RPM ....revolutions per minute
chrg. ....charging	hyd. ....hydraulic	sl. ....slotted
comp. ....compression	I.D. ....inside diameter	sm. ....small
conn. ....connection(s)	inj. ....injector	spd. ....speed
ctsk. ....countersunk	instr. ....instrument(s)	std. ....standard
cvr. ....cover	int. ....internal	tach. ....tachometer
CW .....clockwise	inv. ....inverted	T/C ....torque converter
cyl. ....cylinder	L. ....length	temp. ....temperature
D.C. ....direct current	lb. ....pound	thd. ....thread
dev. ....developed	L.H. ....left hand	turbo. ....turbocharger
dia. ....diameter	lim. ....limiting	U.S. ....undersize
dist. ....distribution	man. ....manifold	V. ....volt
drv. ....drive; driving	max. ....maximum	vari. ....variable
drvn. ....driven	mech. ....mechanical	vent. ....ventilating
eng. ....engine	mod. ....moderate	W .....width
exh. ....exhaust		



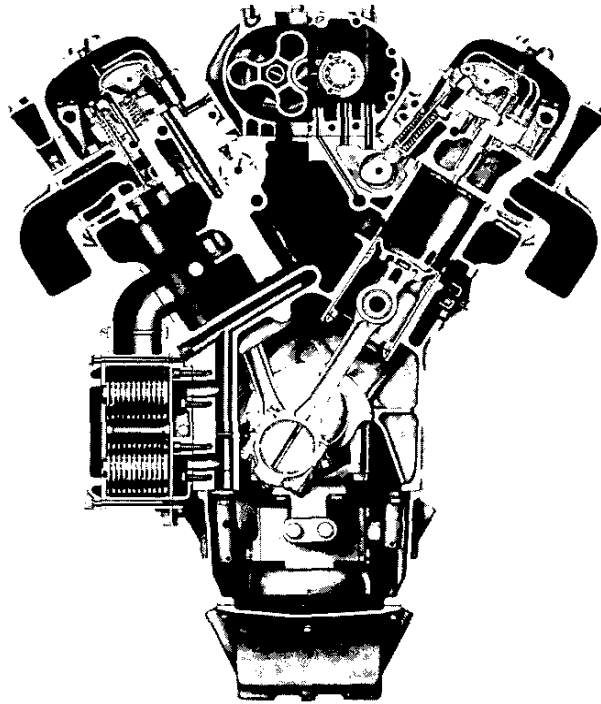


Fig. 1 - Cross Section Engine View (front)

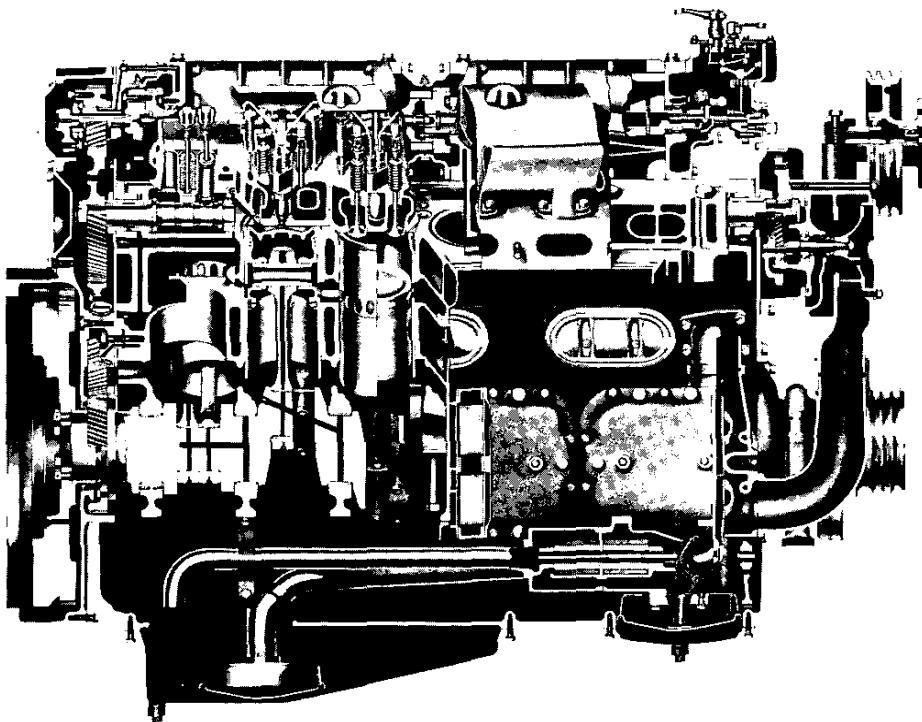


Fig. 2 - Cross Section Engine View (side)



# GM DIESEL

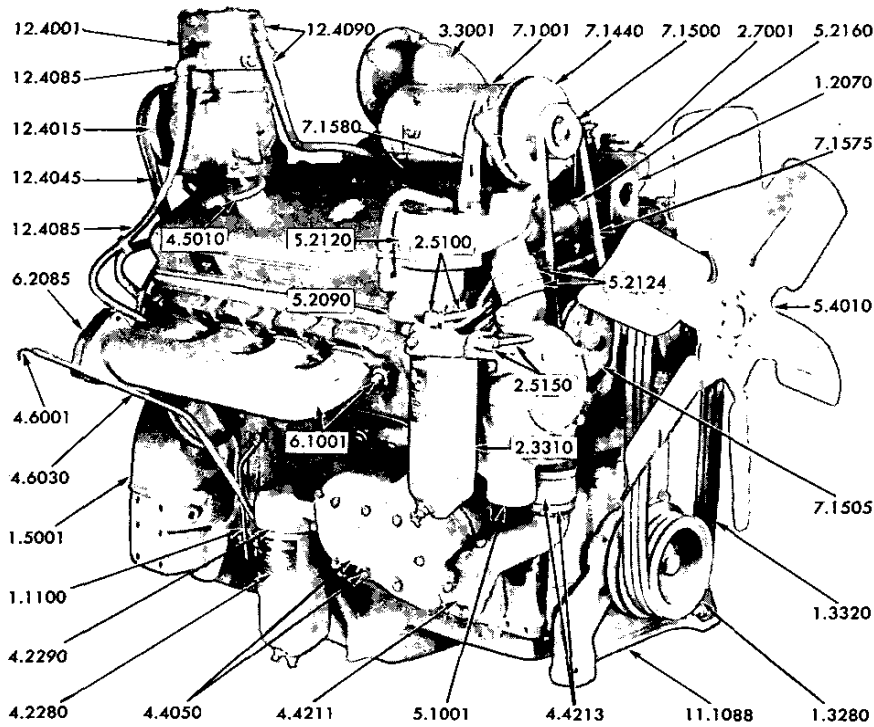


Fig. 3 - Typical Fan to Flywheel Engine

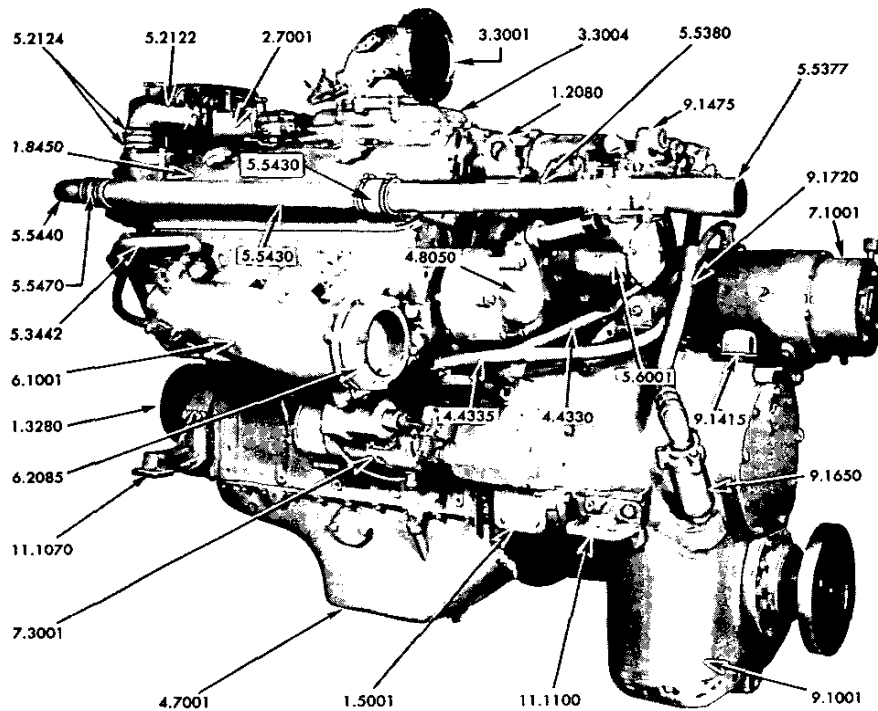


Fig. 4 - Typical Marine Engine



## CYLINDER BLOCK

This diagram shows an exploded view of a 4-cylinder engine block. The central component is the engine block, with four cylinders visible. Various parts are shown around it, including:
 

- Top:** A rectangular plate (1.2010) and a circular gasket (1.2020).
- Left Side:** A long, thin gasket (1.1032) and a smaller gasket (1.1020).
- Right Side:** A large, irregular gasket (1.1010) and a smaller gasket (1.1030).
- Bottom:** A large, irregular gasket (1.1040) and a smaller gasket (1.1050).
- Internal/Top Surface:** Several gaskets (1.2020, 1.2030, 1.2020) and a small circular gasket (1.2022).
- Other Labels:** 4.8001 (a bolt), 1.1001 (a gasket), 1.3110, 1.3140, 1.1145, and 1.1100 (various small components and gaskets).

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# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5196374	Gasket Kit, engine overhaul (includes gaskets for an industrial unit overhaul; for marine units also use kit, <u>5196377</u> ) .....		AR		
-	-	<u>5196377</u>	Gasket Kit, engine overhaul (marine units, supplements kit 5196374) .....		AR		
-	-	5196375	Gasket Kit, engine overhaul (includes gaskets for a basic engine overhaul; for industrial units also use kit 5196379, for marine units also use kit 5196378) .....			AR	
-	-	5196379	Gasket kit, engine overhaul (industrial units, supplements kit 5196375) .....			AR	
-	-	5196378	Gasket Kit, engine overhaul (marine units, supplements kit 5196375) .....			AR	
-	-	5196963	Gasket Kit, engine overhaul (includes gaskets for an industrial unit overhaul; for marine units also use kit 5196132) .....				AR
-	-	5196132	Gasket Kit, engine overhaul (marine units, supplements kit 5196963) .....				AR
5,13	1.1010	5123010	Plate Assy., cylinder block front end .....	1	1	1	
13	1.1010	179839	Bolt, 3/8"-16 x 1" hex. hd. (front plate) .....	3	3	3	
13	1.1010	122408	Bolt, 1/2"-13 x 1" hex. hd. ....	2	2	2	
-	-	103321	Lockwasher, 3/8" .....	3	3	3	
-	-	103323	Lockwasher, 1/2" .....	2	2	2	
5,12	1.1020	5117498	Plate Assy., cylinder block rear end .....	1	1	1	2
5	1.1020	5117058	Cover, cylinder block rear end plate .....	1	1	1	1
12	1.1020	179839	Bolt, 3/8"-16 x 1" hex. hd. (rear plate) .....	9	9	9	18
5	1.1020	106284	Bolt, 3/8"-24 x 5/8" hex. hd. ....	2	2	2	2
5	1.1020	116103	Washer, 3/8" flat copper .....	2	2	2	2
-	-	103321	Lockwasher, 3/8" .....	9	9	9	18
5	1.1030	5117958	Gasket, cylinder block front end plate .....	1	1	1	
5	1.1030	5121835	Gasket, 17/32" I.D. x 1.12" O.D. ....	1	1	1	
5	1.1032	5117031	Gasket, cylinder block rear end plate .....	1	1	1	2
5	1.1032	5117059	Gasket, end plate cover .....	1	1	1	1
5	1.1040	5125905	Cover, cylinder block hand hole (plain) .....	2	4	6	8
5	1.1040	5124754	Cover, cylinder block hand hole (3/4" tap hole) .....	AR	AR	AR	AR
5	1.1040	5122317	Clamp, cylinder block hand hole cover .....	2	4	6	8
5	1.1040	106327	Bolt, 5/16"-18 x 1 3/8" hex. hd. ....	4	8	12	16
-	-	5155596	Washer 5/16" copper) .....	4	8	12	16
5	1.1050	5117016	Gasket, cylinder block hand hole cover .....	2	4	6	8
-	-	5117733	Cover, cylinder block water hole (plain) .....	1	1	1	
-	-	5127788	Cover, cylinder block water hole (3/4" tap hole) .....	AR	AR	AR	
-	-	5122961	Cover, cylinder block water hole (left bank-front) .....				1
-	-	5122962	Cover, cylinder block water hole (left bank-rear) .....				1
-	-	444709	Plug, 3/4" pipe .....				2
-	-	179838	Bolt, 3/8"-16 x 7/8" hex. hd. ....	4	4	4	
-	-	179839	Bolt, 3/8"-16 x 1" hex. hd. ....				4
-	-	116103	Washer, 3/8" flat .....				4
-	-	103321	Lockwasher, 3/8" .....	4	4	4	4
-	-	5108216	Cover, cylinder block oil hole .....				1
-	-	179838	Bolt, 3/8"-16 x 7/8" hex. hd. ....				4
-	-	103321	Lockwasher, 3/8" .....				4
-	-	5117535	Gasket, cylinder block oil hole cover .....				1
-	-	5117734	Gasket, cylinder block water hole cover .....	1	1	1	1
-	-	5117254	Gasket, cylinder block water hole cover-front .....				1
<b>AIR BOX DRAINS</b>							
3,5	1.1100	5117907	Tube Assy., air box drain (dev. L. 10.76") .....	2	2		
3,5	1.1100	5117128	Tube Assy., air box drain (dev. L. 13.90") .....	1	2	2	
3,5	1.1100	5121598	Tube, air box drain (dev. L. 12.24") .....	1	1	2	3
-	-	5100327	Tube Assy., air box drain (dev. L. 17.30") .....				1
3,5	1.1100	137422	Elbow, 5/16" inv. fl. tube 90° .....	2	2	4	4
-	-	137398	Nut, 5/16" inv. fl. tube .....	2	2	4	4
-	-	444687	Plug, 1/8" pipe (air box drain holes) .....	2	2	2	4
5	1.1145	5176668	Clip, air box drain tube .....	2	2	4	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
CYLINDER HEAD							
6	1.2001	5196562	Head Assy., cylinder (includes plugs, nozzles, springs, valve	2			
6	1.2001	5196560	Head Assy., cylinder guide inserts, injector hole tube and		2		4
6	1.2001	5196558	Head Assy., cylinder seal rings)			2	
6	1.2001	5125237	Plug, 1/4" hex. socket hd. pipe (end) .....	10	10	10	12
6	1.2001	5121182	Plug, 1/4" hex. socket hd. pipe (side) .....	14	18	26	36
6	1.2001	444867	Plug, 3/8" hex. socket hd. pipe .....	4	4	4	8
6	1.2001	9409961	Plug, 3/4" pipe .....	8	8	8	8
6	1.2001	5154453	Plug, 3/8"-16 slotted .....	8	8	8	30
6	1.2001	5178976	Plug, 7/16"-14 slotted .....	8	8	8	14
6	1.2001	5150132	Plug, cup (3/4" dia.) .....	4	4	4	8
6	1.2001	5117186	Plug, cup (2" dia.) .....	4	4		2
6	1.2001	5126389	Plug, cup (2" dia. venting) .....				5
6	1.2001	5127843	Hose (3/8" I.D. x 1 1/2" L.) .....				6

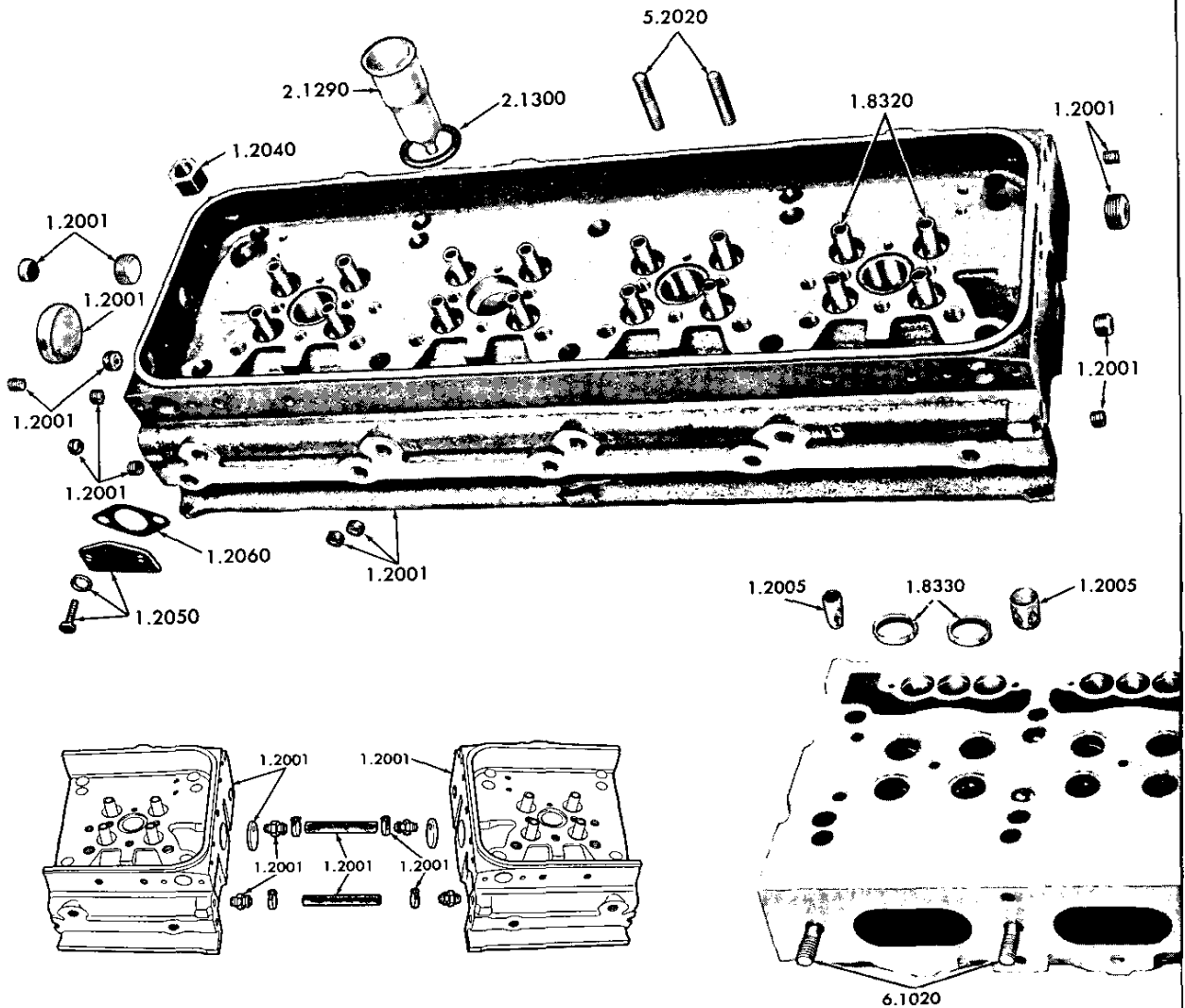


Fig. 6 - Cylinder Head



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
6	1.2001	5127842	Nipple (3/8" dia. hose, 1 1/4" L.) .....				12
6	1.2001	9139801	Clamp, 9/16" - 1 1/16" dia. hose .....				12
-	-	5121788	Baffle (oil drain passages) .....	6	8	12	16
-	-	5126307	Connector (.055 restriction) .....	2	2	2	2
-	-	5123074	Connector (.1065 restriction) .....	2	2	2	2
-	-	5196380	Gasket Kit, cylinder head .....	AR			
-	-	5196381	Gasket Kit, cylinder head } (includes gaskets required to		AR		AR
-	-	5196382	Gasket Kit, cylinder head } replace one cylinder head) .....			AR	
6	1.2005	5172874	Nozzle, cylinder head water (single outlet) .....	8	8	8	16
6	1.2005	5111332	Nozzle, cylinder head water (double outlet) .....	10	12	20	24
5	1.2010	5183330	Gasket, cylinder head compression .....	6	8	12	16
5	1.2020	5119972	Ring, cylinder head oil seal .....	2			
5	1.2020	5119973	Ring, cylinder head oil seal .....		2		4
5	1.2020	5119974	Ring, cylinder head oil seal .....			2	
5	1.2020	5186579	Ring, cylinder head water hole seal .....	8	12	20	24
5	1.2020	5186577	Ring, cylinder head end water hole seal .....	6	6	6	12
-	-	5179232	Ring, cylinder head vent seal (marine units only) .....			2	
5	1.2022	5183305	Gasket, cylinder head water and oil .....	2	2	2	4
5	1.2030	5183329	Stud, cylinder head .....	6	6	6	12
-	-	5117003	Bolt, cylinder head .....	10	14	22	28
6	1.2040	5150113	Nut, cylinder head .....	6	6	6	12
6	1.2050	5150268	Cover, cylinder head governor hole .....	6	6	6	12
6	1.2050	180016	Bolt, 1/4" - 20x1/2" hex. hd. ....	12	12	12	24
6	1.2050	5179709	Washer, 1/4" flat copper .....	12	12	12	24
6	1.2060	5123812	Gasket, cylinder head governor hole cover .....	6	6	6	12
<b>ENGINE LIFTER BRACKET</b>							
-	-	5123553	Bracket, engine lifter - front .....	1	1	1	
-	-	5129360	Bracket, engine lifter - front .....	1	1	1	
3	1.2070	5126975	Bracket, engine lifter - front .....	1	1	1	
-	-	5122293	Bracket, engine lifter - rear .....	2	2	2	4
-	-	5119379	Bracket, engine lifter - rear .....	2	2	2	
78	1.2080	5126230	Bracket, engine lifter - rear .....	1	1	1	
<b>CRANKSHAFT</b>							
7	1.3001	5117965	Crankshaft Assy. } .....	1			
7	1.3001	5117966	Crankshaft Assy. } (includes dowels) .....		1		
7	1.3001	5117373	Crankshaft Assy. } .....			1	
7	1.3001	5129680	Crankshaft Assy. } .....				1
7	1.3001	5177528	Dowel, crankshaft .....	2	2	2	4
-	-	444687	Plug, 1/8" pipe .....	3	4	6	8
7	1.3001	5173048	Plug, 1/4" pipe (with baffle 5155661) .....	1	1	1	
7	1.3001	103878	Plug, 1/4" pipe .....	1	1	1	
-	-	5155661	Baffle, crankshaft grease (no hole) .....	1	1	1	
-	-	5159331	Baffle, crankshaft oil (hole for wick) .....	1	1	1	
-	-	5176721	Wick Assy., crankshaft oil (holder 1 1/2" L.) .....	1	1	1	
-	-	5172253	Wick Assy., crankshaft oil (holder 2 3/8" L.) .....	1	1	1	
-	-	5155491	Wick Assy., crankshaft oil (holder 2 7/8" L.) .....	1	1	1	
-	-	5155492	Wick, crankshaft oil (6 5/16" L.) .....	1	1	1	
-	-	5175777	Washer, crankshaft oil wick (felt) .....	1	1	1	
7,36	1.3040	5115454	Seal, crankshaft oil - front .....	1	1		
7	1.3040	5114335	Seal, crankshaft oil - front .....				1
7	1.3050	5150174	Slinger, crankshaft oil (front) .....			1	
7	1.3055	5122541	Spacer, crankshaft front oil seal (.553" L.) .....	1	1		
-	-	5122983	Spacer, crankshaft front oil seal (2" L.) .....	1	1		
-	-	5122214	Spacer, crankshaft front oil seal (2.55" L.) .....	1	1		
7	1.3055	5187760	Spacer, crankshaft front oil seal (3.06" L.) .....	1	1		
7,9	1.3060	5114335	Seal, crankshaft oil - rear (single lip) .....	1	1	1	
7,9	1.3060	5172000	Seal, crankshaft oil - rear (double lip) .....	1	1	1	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
7	1.3060	5114082	Seal, crankshaft oil - rear .....				1
7	1.3060	5192776	Seal, crankshaft oil - rear (single lip, oversize) (use with sleeve 5193413) .....	AR	AR	AR	
7	1.3060	5192777	Seal, crankshaft oil - rear (double lip, oversize) (use with sleeve 5193413) .....	AR	AR	AR	
7	1.3060	5197159	Sleeve, crankshaft rear oil seal (use with oversize seal) .....	AR	AR	AR	
7	1.3090	5196319	Shell Set, crankshaft main bearing (standard) .....	4	5	7	10
-	-	5196330	Shell Set, crankshaft main bearing (.002 U.S.) .....	AR	AR	AR	AR
-	-	5196333	Shell Set, crankshaft main bearing (.010 U.S.) .....	AR	AR	AR	AR
-	-	5196336	Shell Set, crankshaft main bearing (.020 U.S.) .....	AR	AR	AR	AR
-	-	5196339	Shell Set, crankshaft main bearing (.030 U.S.) .....	AR	AR	AR	AR
7	1.3100	5117005	Washer, crankshaft main bearing thrust (standard) .....	4	4	4	4
7	1.3100	5196753	Washer, crankshaft main bearing thrust (.005 O.S.) .....	AR	AR	AR	AR
7	1.3100	5196754	Washer, crankshaft main bearing thrust (.010 O.S.) .....	AR	AR	AR	AR
7	1.3100	141346	Pin, 3/16" x 1/2" dowel .....	4	4	4	4
5,7	1.3110	5196317	Cap, crankshaft main bearing .....	4	5	7	10
5	1.3140	5116353	Bolt, crankshaft main bearing cap .....	8	10	14	20
-	-	5124988	Washer, crankshaft main bearing cap .....	8	10	14	20
7,12	1.3145	5117102	Gear, crankshaft timing (RH engine) .....	1	1	1	
7,12	1.3145	5122101	Gear, crankshaft timing (LH engine) .....	1	1	1	
-	-	5126035	Gear Assy., crankshaft timing - front (R.H. helix, R. H. engine rotation) .....				1
7	1.3145	5124719	Gear, crankshaft timing - rear (R.H. helix, R.H. engine rotation) .....				1
7,12	1.3145	9409035	Bolt, 3/8" - 24 x 1" hex. hd. ....	6	6	6	6
-	-	5129766	Damper Assy., front crankshaft gear .....				1
-	-	5126368	Bolt, front crankshaft gear damper .....				6

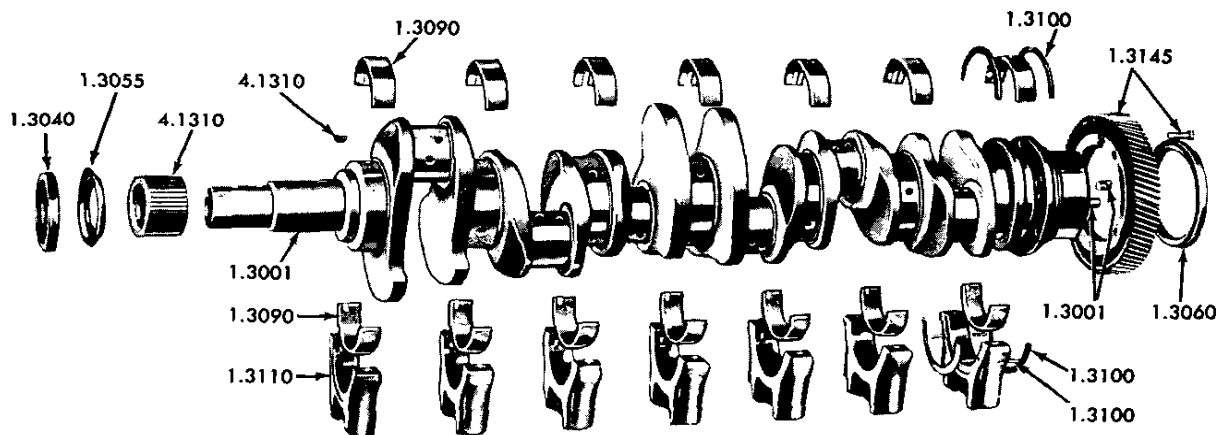


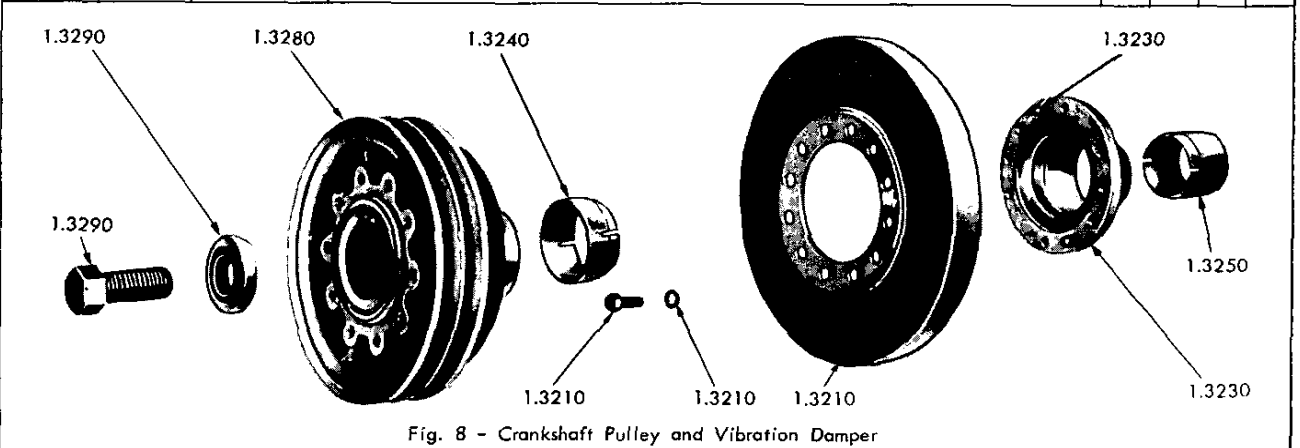
Fig. 7 - Crankshaft

CRANKSHAFT FRONT COVER							
-	-	5126217	Cover Assy., crankshaft front (with scavenging oil pump) .....	1	1		
-	-	5117377	Cover Assy., crankshaft front (industrial units) (stationary mounting) .....				1
-	-	5117811	Cover Assy., crankshaft front (marine units) (stationary mounting) .....				1
-	-	5122236	Cover Assy., crankshaft front (industrial units) (trunnion mounting) .....				1
-	-	186628	Bolt, 3/8" - 16 x 1 1/2" hex. hd. ....				2
-	-	179844	Bolt, 3/8" - 16 x 1 5/8" hex. hd. ....				2
-	-	179848	Bolt, 3/8" - 16 x 2 1/4" hex. hd. ....				2
-	-	179887	Bolt, 1/2" - 13 x 1 3/4" hex. hd. ....				6
-	-	186689	Bolt, 1/2" - 13 x 2" hex. hd. ....				4
-	-	186656	Bolt, 1/2" - 13 x 2 1/4" hex. hd. ....				6



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	190770	Bolt, 1/2" - 13 x 3 1/4" hex. hd. ....	2	2		
-	-	186659	Bolt, 1/2" - 13 x 3 3/4" hex. hd. ....	4	4		
-	-	103321	Lockwasher, 3/8" .....	2	2	2	
-	-	103323	Lockwasher, 1/2" .....	6	6	6	
-	-	5121714	Gasket, crankshaft front cover .....	1	1	1	
<b>VIBRATION DAMPER</b>							
8	1.3210	5177764	Damper, vibration .....			1	
76	1.3210	5127684	Damper, vibration (18" dia.) .....				1
-	-	442733	Bolt, 1/2" - 13 x 1 1/4" hex. hd. ....				8
8	1.3210	181394	Bolt, 7/16" - 20 x 7/8" hex. hd. ....			6	
8	1.3210	103322	Lockwasher, 7/16" .....			6	
8	1.3230	5186050	Hub Assy., vibration damper (includes dowel) .....			1	
-	-	5128289	Hub Assy., vibration damper (includes dowel) .....				1
-	-	5156295	Dowel, vibration damper hub (1" L.) .....				2
8	1.3230	5175641	Dowel, vibration damper hub (1 3/8" L.) .....			2	
-	-	5120753	Plate, scuff .....				1
-	-	9410925	Bolt, 9/16" - 18 x 2 1/4" hex. hd. ....				6
8	1.3240	5158641	Cone, vibration damper - front (17/32" L.) .....			1	
8	1.3240	5158640	Cone, vibration damper - front (2 1/8" L.) .....			1	
8	1.3240	5122481	Cone, vibration damper - rear (3.094" L.) .....			1	
8	1.3250	5124552	Cone, vibration damper - rear (1.701" L.) .....			1	



				QUANTITY PER			
				6	8	12	16
<b>CRANKSHAFT PULLEY</b>							
8	1.3280	5128954	Pulley, crankshaft (2 grooves 7.50" dia.) .....	1	1	1	1
3	1.3280	5122237	Pulley, crankshaft (3 grooves 6.54" dia., 1 groove 7.50" dia.) .....	1			
3	1.3280	5122482	Pulley, crankshaft (3 grooves 6.84" dia., 1 groove 7.50" dia.) ....		1	1	
8	1.3280	5169905	Pulley, crankshaft (2 grooves 9" dia.) (front power take-off) .....	1	1	1	
76	1.3280	5124386	Pulley, crankshaft (4 groove 7.50" dia.) .....				1
-	-	117982	Key, 3/8" x 1 1/4" woodruff .....	AR	AR	AR	AR
8	1.3290	5164160	Retainer, crankshaft pulley (1 1/2" O.D.) .....	1	1	1	1
8	1.3290	5157930	Retainer, crankshaft pulley (2 3/8" O.D.) .....	1	1	1	1
8	1.3290	5153623	Bolt, crankshaft pulley retainer (2 1/4" L.) .....	1	1	1	1
8	1.3290	5160266	Bolt, crankshaft pulley retainer (2 3/4" L.) .....	1	1	1	1
<b>CRANKSHAFT PULLEY BELT</b>							
3	1.3320	5119702	Belt Set, crankshaft pulley drive (3 belts, 54" L., .525" W.) .....	1	1	1	
3, 76	1.3320	5115057	Belt Set, crankshaft pulley drive (3 belts, 69.00" L., .525" W.) ..	1	1	1	1
3	1.3320	5122844	Belt Set, crankshaft pulley drive (2 belts, 65.00" L., .525" W.) ..	1	1	1	
3	1.3320	5122849	Belt Set, crankshaft pulley drive (3 belts, 62.00" L., .525" W.) ..	1	1	1	
3	1.3320	5126075	Belt Set, crankshaft pulley drive (3 belts, 63.76" L., .500" W.) ...				1



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5118199	Belt, crankshaft pulley drive (49.770" L., .697" W.) .....	1	1	1	
-	-	5170041	Belt, crankshaft pulley drive (51.887" L., .654" W.) (jointed) ....	1	1	1	
3	1.3320	5123805	Belt Set, crankshaft pulley drive (3 belts, 57.50" L., .525" W.) ....	1	1	1	
3	1.3320	5122847	Belt Set, crankshaft pulley drive (3 belts, 51" L., .525" W.) .....	1	1	1	
<b>FLYWHEEL</b>							
The proper flywheel for your engine can be interpreted by the identifying type number on the Option Plate on your engine. Your GM Diesel dealer or distributor will interpret the flywheel type number into the part number.							
9,78	1.4001	-	Flywheel Assy. (includes ring gear) .....	1	1	1	1
9	1.4001	5117549	Flywheel Assy. (includes ring gear) (marine units) .....			1	
9	1.4001	5100080	Flywheel Assy. (includes ring gear) (marine units) .....				1
9	1.4001	5120753	Plate, flywheel scuff .....	1	1	1	
9	1.4001	5110558	Plate, flywheel scuff .....				1
9	1.4001	9409532	Bolt, flywheel lock (2" L.) .....	6	6	6	
9	1.4001	9410925	Bolt, flywheel lock (2 1/4" L.) .....	6	6	6	
9	1.4001	9412015	Bolt, flywheel lock (2 1/2" L.) .....	6	6	6	6
9	1.4001	9411631	Bolt, flywheel lock (2 3/4" L.) .....	6	6	6	
9	1.4001	9412016	Bolt, flywheel lock (3 3/8" L.) .....	6	6	6	6
-	-	954422	Bearing, clutch pilot (ball) (1.18" I.D. x 2.83" O.D.) .....	1	1	1	
-	-	954421	Bearing, clutch pilot (ball) (0.98" I.D. x 2.44" O.D.) .....	1	1	1	
-	-	954411	Bearing, clutch pilot (ball) (1.18" I.D. x 2.44" O.D.) .....	1	1	1	
-	-	7451256	Bearing, clutch pilot (roller) (1.18" I.D. x 2.83" O.D.) .....	1	1	1	
-	-	7451255	Bearing, clutch pilot (roller) (1.38" I.D. x 3.15" O.D.) .....	1	1	1	1
-	-	5162779	Seal, clutch pilot bearing grease (1 5/8" I.D.) .....	1	1	1	
-	-	5162780	Seal, clutch pilot bearing grease (1 27/32" I.D.) .....	1	1	1	1
-	-	5110784	Retainer, clutch pilot bearing (2 3/4" I.D.) .....	1	1	1	
-	-	5187146	Retainer, clutch pilot bearing (1 5/8" I.D.) .....	1	1	1	

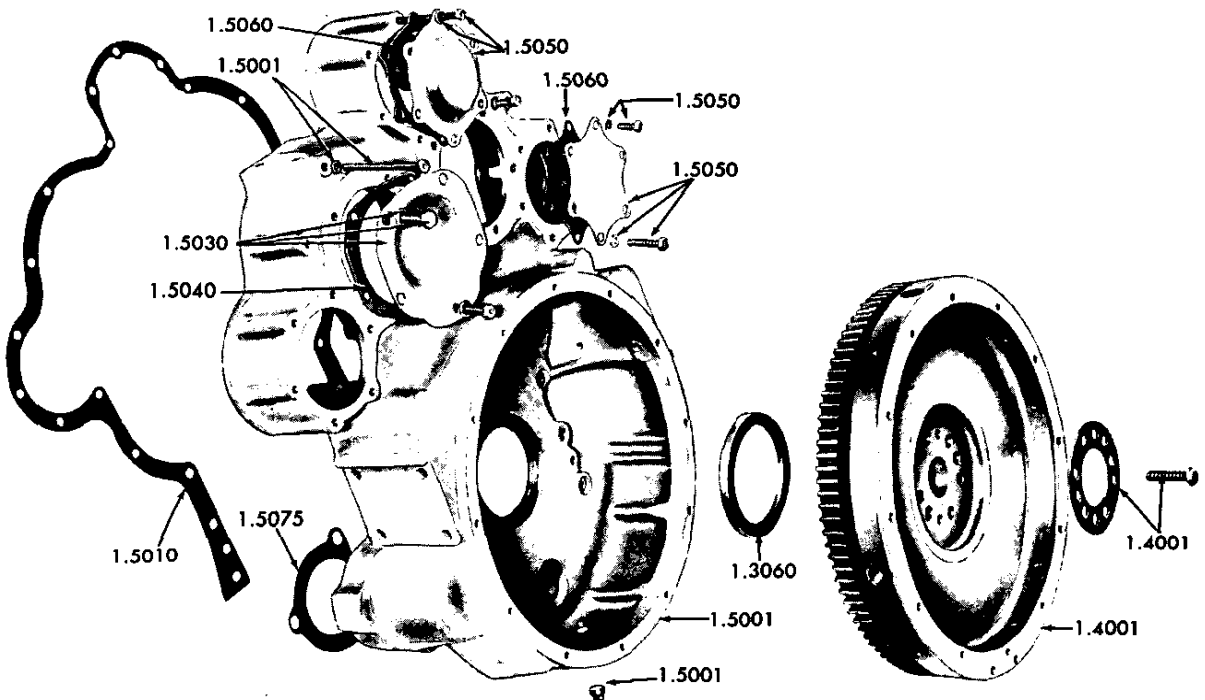


Fig. 9 - Flywheel and Flywheel Housing



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
<b>FLYWHEEL HOUSING</b>							
The proper flywheel housing for your engine can be interpreted by your GM Diesel dealer or distributor. Furnish him with the model and type number, if shown, on the Option Plate on your engine.							
9,71	1.5001	-	Housing, flywheel .....	1	1	1	1
-	-	5117223	Housing, flywheel - front .....				1
-	-	103880	Plug, 1/2" pipe .....	1	1	1	
-	-	103869	Plug, 3/4" pipe .....	1	1	1	2
-	-	5111798	Plug, 1" pipe .....	1	1	1	3
-	-	144017	Plug, 1 1/4" pipe .....	1	1	1	
-	-	9409028	Bolt, 3/8"-16x1" hex. hd. lock .....	6	6	6	12
-	-	179839	Bolt, 3/8"-16x1" hex. hd. ....	2	2	2	4
-	-	186622	Bolt, 3/8"-16x1 1/4" hex. hd. ....	1	1	1	2
-	-	186309	Bolt, 3/8"-24x3 1/4" hex. hd. ....	4	4	4	
-	-	186311	Bolt, 3/8"-24x3 3/4" hex. hd. ....	3	3	3	
-	-	5121466	Bolt (3/8"-24x3 7/8") .....				14
-	-	190770	Bolt, 1/2"-13x3 1/2" hex. hd. ....	6	6	6	12
-	-	103341	Washer, 3/8" flat .....	6	6	6	12
-	-	103321	Lockwasher, 3/8" .....	10	10	10	20
-	-	103323	Lockwasher, 1/2" .....	6	6	6	12
9	1.5010	5117173	Gasket, flywheel housing .....	1	1	1	2
9	1.5030	5122281	Cover, flywheel housing large hole .....	2	2	2	3
-	-	100146	Bolt, 7/16"-14x1" hex. hd. ....	2	2	2	3
9	1.5030	179882	Bolt, 1/2"-13x1 1/8" hex. hd. ....	8	8	8	12
-	-	103322	Lockwasher, 7/16" .....	2	2	2	3
9	1.5030	103323	Lockwasher, 1/2" .....	8	8	8	12
9	1.5040	5117061	Gasket, flywheel housing large hole cover .....	2	2	2	3
9,78	1.5050	5122219	Cover, flywheel housing small hole .....	3	3	3	5
-	-	5124937	Stud (3/8"-16x5.22" L.) .....				1
-	-	5125193	Stud (3/8"-24x4.94" L.) .....				1
9,78	1.5050	179837	Bolt, 3/8"-16x3/4" hex. hd. ....	AR	AR	AR	AR
9,78	1.5050	179838	Bolt, 3/8"-16x7/8" hex. hd. ....	AR	AR	AR	AR
9,78	1.5050	179839	Bolt, 3/8"-16x1" hex. hd. ....	AR	AR	AR	AR
9,78	1.5050	186288	Bolt, 3/8"-16x4 1/2" hex. hd. ....	AR	AR	AR	AR
9,78	1.5050	186315	Bolt, 3/8"-24x4 1/2" hex. hd. ....	AR	AR	AR	AR
9	1.5050	103321	Lockwasher, 3/8" .....	AR	AR	AR	AR
-	-	117049	Nut, 3/8"-24 hex. ....	AR	AR	AR	AR
9	1.5060	5122227	Gasket, flywheel housing small hole cover .....	3	3	3	5
-	-	5170961	Cover, flywheel housing inspection hole (marine units) .....	1	1		
-	-	179838	Bolt, 3/8"-16x7/8" hex. hd. ....	4	4		
-	-	103321	Lockwasher, 3/8" .....	4	4		
-	-	5170895	Gasket, flywheel housing inspection hole cover gasket .....	1	1		
<b>CONNECTING ROD AND PISTON</b>							
10	1.6001	5135756	Rod Assy., connecting (includes indented items) .....	6	8	12	16
10	1.6001	5117023	Bolt, connecting rod .....	12	16	24	32
10	1.6001	5117629	Nut, connecting rod .....	12	16	24	32
10	1.6010	5150140	Nozzle, connecting rod spray .....	6	8	12	16
10	1.6100	5196320	Shell Set, connecting rod bearing (standard) .....	6	8	12	16
10	1.6100	5196342	Shell Set, connecting rod bearing (.002" U.S.) .....	AR	AR	AR	AR
10	1.6100	5196345	Shell Set, connecting rod bearing (.010" U.S.) .....	AR	AR	AR	AR
10	1.6100	5196348	Shell Set, connecting rod bearing (.020" U.S.) .....	AR	AR	AR	AR
10	1.6100	5196351	Shell Set, connecting rod bearing (.030" U.S.) .....	AR	AR	AR	AR
10	1.6110	5197026	Piston Assy. (standard) .....	6	8	12	16
10	1.6110	5197027	Piston Assy. (.010" O.S.) .....	AR	AR	AR	AR
10	1.6110	5197028	Piston Assy. (.020" O.S.) .....	AR	AR	AR	AR
10	1.6110	5197029	Piston Assy. (.030" O.S.) .....	AR	AR	AR	AR



**G M D I E S E L**

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
10	1.6115	5197037	Ring Set, piston (standard)	6	8	12	16
10	1.6115	5197038	Ring Set, piston (.010" O.S.)	AR	AR	AR	AR
10	1.6115	5197039	Ring Set, piston (.020" O.S.)	AR	AR	AR	AR
10	1.6115	5197040	Ring Set, piston (.030" O.S.)	AR	AR	AR	AR
10	1.6140	5188406	Pin, piston (standard)	6	8	12	16
10	1.6140	5194543	Pin, piston (.010" O.S.)	AR	AR	AR	AR
10	1.6150	5188405	Retainer, piston pin	12	16	24	32
10	1.6180	5113953	Liner, cylinder (standard)	6	8	12	16
10	1.6180	5193732	Liner, cylinder (.005" O.S., O.D.)	AR	AR	AR	AR
10	1.6180	5193733	Liner, cylinder (.010" O.S., O.D.)	AR	AR	AR	AR
10	1.6180	5193734	Liner, cylinder (.020" O.S., O.D.)	AR	AR	AR	AR
10	1.6180	5193735	Liner, cylinder (.030" O.S., O.D.)	AR	AR	AR	AR
-	-	5197025	Cylinder Kit (includes standard size piston assy., piston ring set, piston pin and liner)	AR	AR	AR	AR
-	-	5184484	Insert, cylinder liner (standard and .005" O.S. liner)	6	8	12	16
-	-	5193316	Insert, cylinder liner (.010" to .030" O.S. liner)	AR	AR	AR	AR

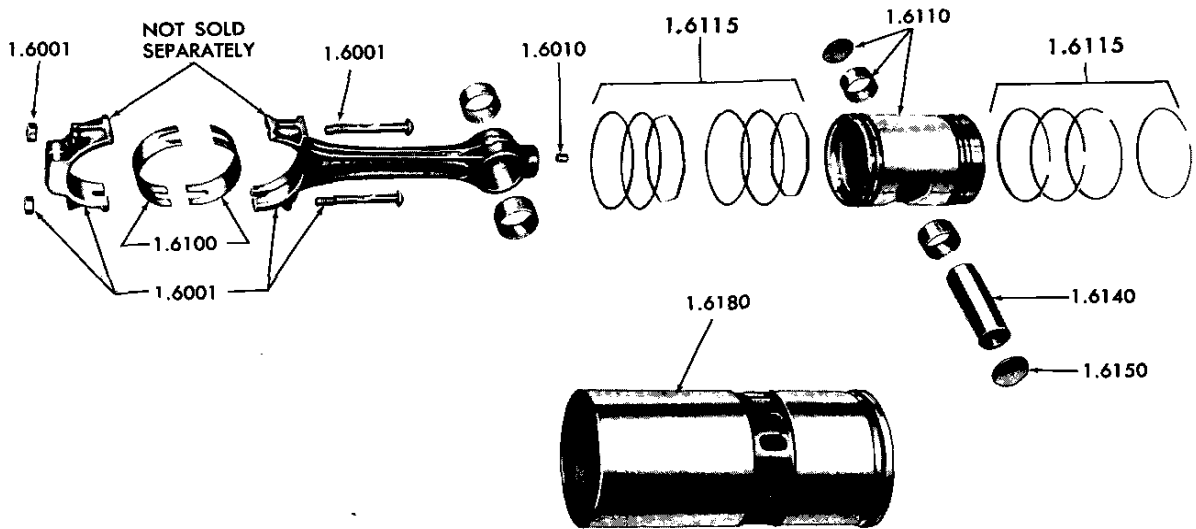


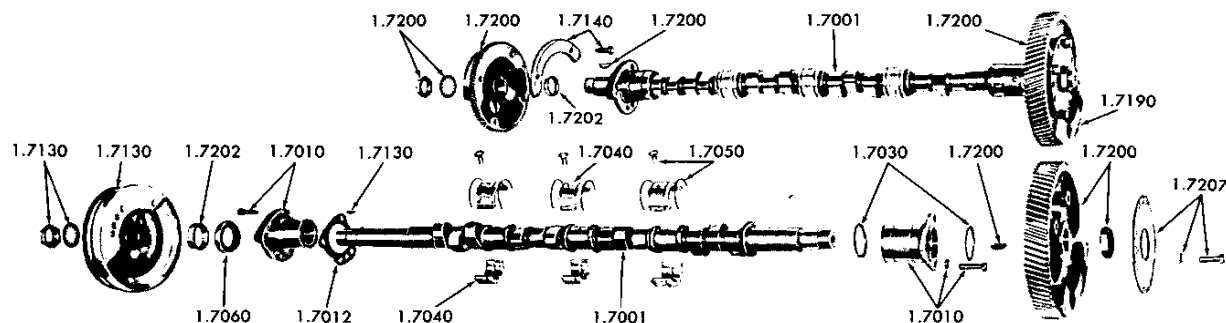
Fig. 10 - Connecting Rod and Liner

CAMSHAFT AND GEAR TRAIN									
11	1.7001	5117857	Camshaft (right bank, RH engine) .....	1					
11	1.7001	5117858	Camshaft (left bank, RH engine) .....	1					
11	1.7001	5117859	Camshaft (right bank, LH engine) .....	1					
11	1.7001	5117860	Camshaft (left bank, LH engine) .....	1					
11	1.7001	5117853	Camshaft (right bank, RH engine) .....		1				
11	1.7001	5117854	Camshaft (left bank, RH engine) .....		1				
11	1.7001	5117855	Camshaft (right bank, LH engine) .....		1				
11	1.7001	5117856	Camshaft (left bank, RH engine) .....		1				
11	1.7001	5117849	Camshaft (right bank, RH engine) .....			1			
11	1.7001	5117850	Camshaft (left bank, RH engine) .....			1			
11	1.7001	5117851	Camshaft (right bank, LH engine) .....			1			
11	1.7001	5117852	Camshaft (left bank, LH engine) .....			1			
11	1.7001	5126018	Camshaft (right bank, rear) .....				1		
11	1.7001	5126017	Camshaft (left bank, rear) .....				1		
11	1.7001	5126020	Camshaft (right bank, front) .....					1	
11	1.7001	5126019	Camshaft (left bank, front) .....					1	
11	1.7010	5111422	Bearing, camshaft end rear (standard) (includes bushings) .....	2	2	2	2	4	



**GM DIESEL**

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
11	1.7010	5117984	Bearing, camshaft end front (standard) (includes bushings) .....	2	2	2	
11	1.7010	5124606	Bearing, camshaft end front (standard) (includes bushings) .....				4
11	1.7010	5194858	Bearing, camshaft end rear (.010" U.S.) (includes bushings) .....	AR	AR	AR	AR
11	1.7010	5194859	Bearing, camshaft end rear (.020" U.S.) (includes bushings) .....	AR	AR	AR	AR
-	-	5117649	Bolt, camshaft end front bearing .....				4
11	1.7010	9414268	Bolt, 3/8"-16 x 1 1/2" (12 pt. hd.) .....	6	6	6	
11	1.7010	186622	Bolt, 3/8"-16 x 1 1/4" hex. hd. ....	6	6	6	12
11	1.7010	103321	Lockwasher, 3/8" .....	12	12	12	12
11	1.7012	5117243	Gasket, camshaft front end bearing .....	1	1	1	
11	1.7030	5111424	Washer, camshaft end bearing thrust (standard) .....	4	4	4	8
11	1.7030	5194826	Washer, camshaft end bearing thrust (.005" O.S.) .....	AR	AR	AR	AR
11	1.7030	5194827	Washer, camshaft end bearing thrust (.010" O.S.) .....	AR	AR	AR	AR
11	1.7040	5196026#	Bearing Set, camshaft intermediate (standard) .....	4	6	10	12
11	1.7040	5196029#	Bearing Set, camshaft intermediate (.010" O.S. on O.D.) .....	AR	AR	AR	AR
11	1.7040	5196027#	Bearing Set, camshaft intermediate (.010" U.S. on I.D.) .....	AR	AR	AR	AR
11	1.7040	5196028#	Bearing Set, camshaft intermediate (.020" U.S. on I.D.) .....	AR	AR	AR	AR
11	1.7050	5115572	Ring, camshaft intermediate bearing lock .....	8	12	20	24
11	1.7050	5117649	Bolt, camshaft intermediate bearing retaining .....	4	6	10	12
11	1.7060	5116476	Seal, camshaft oil (front) (left bank) .....	1	1	1	



**Fig. 11 - Camshaft**

11	1.7130	5117777	Pulley, camshaft front balancer (5.38" dia.) .....	1			
11	1.7130	5122258	Pulley, camshaft front balancer (5.38" dia.) .....		1		
11	1.7130	5122259	Pulley, camshaft front balancer (5.38" dia.) .....				1
11	1.7130	127559	Key, 1/4" x 3/4" woodruff .....	1	1	1	
11	1.7130	5177769	Lockwasher, 1 1/8" internal tooth .....	1	1	1	
11	1.7130	5150087	Nut, 1 1/8" x 18 hex. ....	1	1	1	
11	1.7140	5126903	Weight, front balancer .....			1	
11	1.7140	9409035	Bolt, 3/8"-24 x 1" hex. hd. lock .....			2	
11	1.7190	5123497	Weight, rear balancer .....			2	
-	-	9409037	Bolt, 3/8"-24 x 1 1/4" hex. hd. lock .....			4	
11,12	1.7200	5121815	Gear, camshaft (rear, right bank) .....	1	1		
11,12	1.7200	5121816	Gear, camshaft (rear, left bank) .....	1	1		
11	1.7200	5126904	Gear, camshaft (front, right bank) .....	1	1		
11,12	1.7200	5117134	Gear, camshaft (rear, right bank) .....				1
11,12	1.7200	5117133	Gear, camshaft (rear, left bank) .....				1
11	1.7200	5126839	Gear, camshaft (front, right bank) .....				1
11	1.7200	5126014	Gear, camshaft (R.H. helix) .....				2
11	1.7200	5126015	Gear, camshaft (L.H. helix) .....				2
11	1.7200	127559	Key, 1/4" x 3/4" woodruff (front) .....	1	1	1	
11	1.7200	5153914	Key, 1/4" x 1" woodruff (rear) .....	2	2	2	4
11	1.7200	5177769	Lockwasher, 1 1/8" .....	1	1	1	
11,12	1.7200	5150087	Nut, 1 1/8"-18 hex. ....	3	3	3	4
11	1.7202	5116485	Spacer, camshaft gear .....	2	2	2	
11,12	1.7207	5172734	Retainer, camshaft gear nut .....	2	2	2	4
11,12	1.7207	181627	Bolt, 3/8"-24 x 1" hex. hd. ....	8	8	8	16
11	1.7207	103321	Lockwasher, 3/8" .....	8	8	8	16

# A bearing set consists of one upper and one lower bearing.



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
12	1.7222	5113817	Gear, idler (RH engine rotation) .....	1	1	1	2
12	1.7222	5113818	Gear, idler (LH engine rotation) .....	1	1	1	
12	1.7225	7451142	Bearing Assy., idler .....	1	1	1	
12	1.7227	5176998	Retainer, idler gear bearing .....	1	1	1	2
-	-	5176999	Lock, bolt (for 5/16" dia. bolt) .....	3	3	3	6
12	1.7227	446072	Bolt, 5/16"-24 x 1/2" hex. hd. ....	6	6	6	12
12	1.7250	5117104	Hub Assy., idler gear (includes dowel) .....	1	1	1	2
-	-	5151444	Dowel, idler gear hub .....	1	1	1	2
12	1.7250	186689	Bolt, 1/2"-13 x 2" hex. hd. ....	1	1	1	2
-	-	5167714	Washer (1/2" dia. bolt) .....	1	1	1	2
12	1.7260	5117141	Spacer Assy., idler gear hole (includes dowel) .....	1	1	1	2
-	-	5151444	Dowel, idler gear hole spacer .....	1	1	1	2
12	1.7260	186689	Bolt, 1/2"-13 x 2" hex. hd. ....	1	1	1	2
-	-	5167714	Washer (1/2" dia. bolt) .....	1	1	1	2

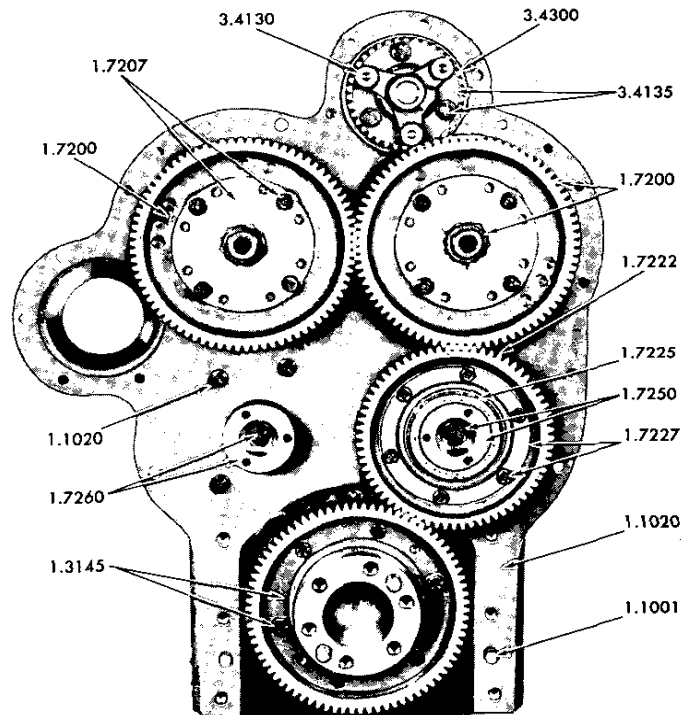


Fig. 12 - Gear Train

BALANCE WEIGHT COVER								
13	1.7470	5123565	Cover Assy., balance weight (plain)	}	(includes dowel pin) .....	1	1	1
13	1.7470	5123564	Cover Assy., balance weight (for tachometer drive)			1	1	1
13	1.7470	5117960	Cover Assy., balance weight (for generator drive) (includes oil seal and dowel pin) .....			1	1	1
-	-	141236	Pin, 3/8" x 1/2" dowel .....			3	3	3
13	1.7470	181371	Bolt, 3/8"-24 x 1 3/8" hex. hd. ....			6	6	6
13	1.7470	179848	Bolt, 3/8"-16 x 2 1/4" hex. hd. ....			2	2	2
13	1.7470	179888	Bolt, 1/2"-13 x 1 7/8" hex. hd. ....			1	1	1
13	1.7470	428696	Bolt, 5/8"-11 x 2 1/2" hex. hd. ....			2	2	2



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	103345	Washer, 5/8" flat .....	2	2	2	
-	-	103321	Lockwasher, 3/8" .....	8	8	8	
-	-	103323	Lockwasher, 1/2" .....	1	1	1	
-	-	117049	Nut, 3/8"-24 hex. ....	5	5	5	
-	-	5177786	Seal, balance weight cover oil (for cover 5117960) .....	1	1	1	
-	-	5123638	Gasket, balance weight cover .....	1	1	1	

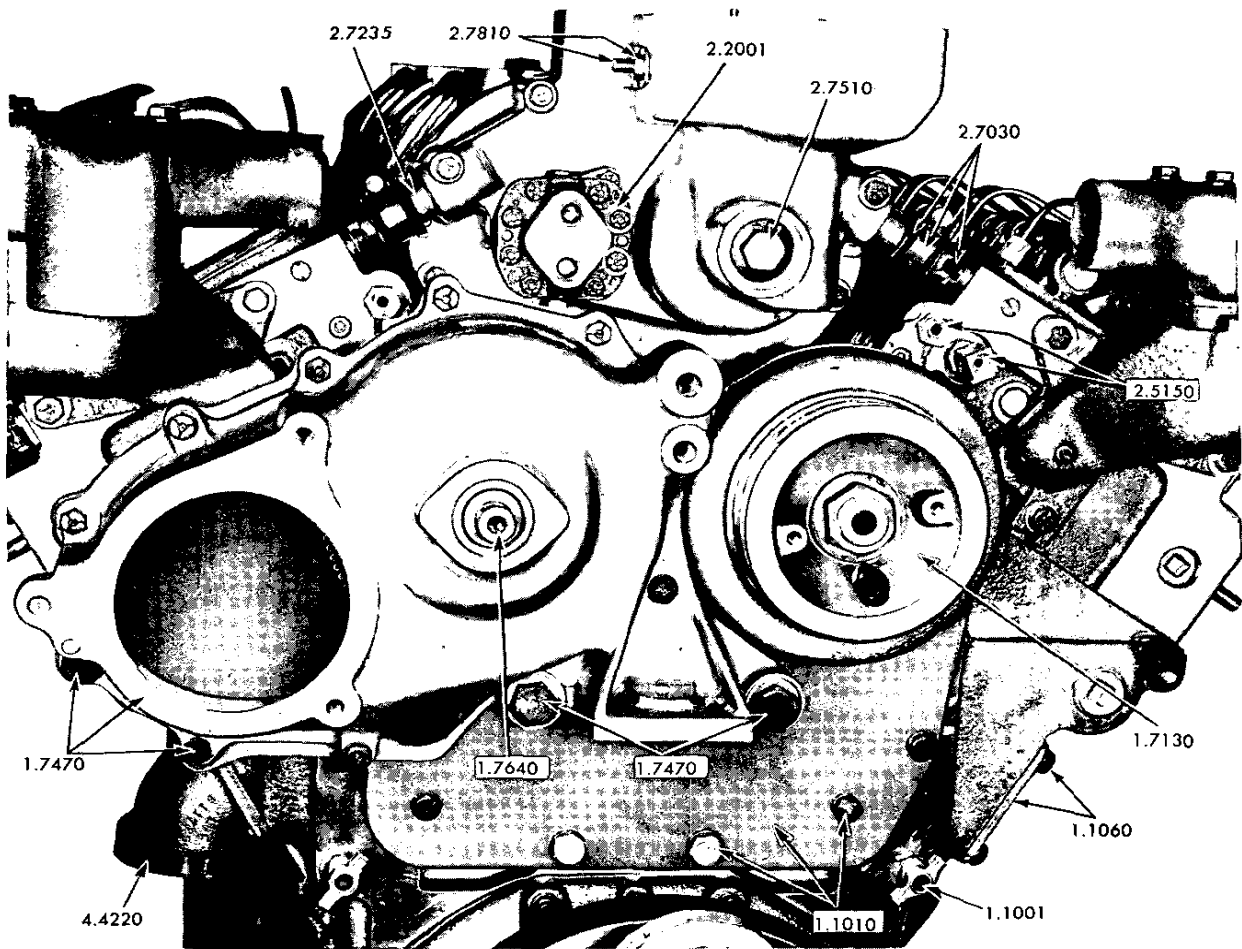


Fig. 13 - Balance Weight Cover

ACCESSORY DRIVE							
14	1.7605	5168696	Pulley, accessory drive .....	1			
14	1.7605	106751	Key, 3/16" x 3/4" woodruff .....	1			
14	1.7605	451082	Nut, 3/4"-16 hex. lock .....	1			
14	1.7630	2136944	Plate, accessory drive .....	1			
-	-	5119920	Bolt, accessory drive plate .....	4			
-	-	5150568	Washer, accessory drive plate bolt .....	1			
14	1.7640	5122876	Shaft, accessory drive .....	1			
14	1.7645	5123116	Retainer Assy., accessory drive (includes bearing and oil seal)...	1			
14	1.5030	179857	Bolt, 7/16"-14 x 7/8" hex. hd. ....	1			
14	1.5030	179882	Bolt, 1/2"-13 x 1 1/8" hex. hd. ....	4			



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
14	1.5030	103322	Lockwasher, 7/16" .....	1			
14	1.5030	103323	Lockwasher, 1/2" .....	4			
14	1.7655	954469	Bearing, accessory drive .....	1			
14	1.7660	5155462	Seal, accessory drive oil .....	1			

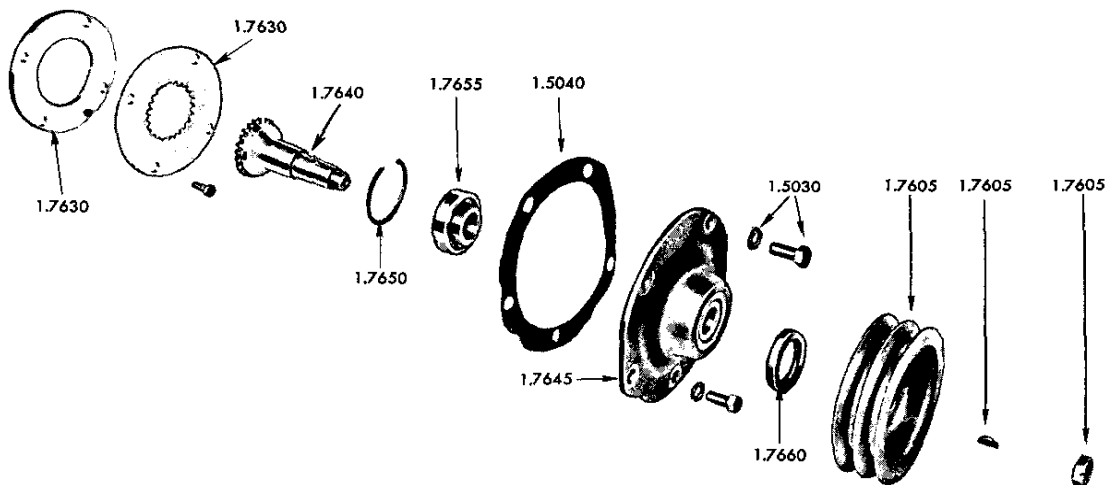


Fig. 14 - Accessory Drive

VALVE OPERATING MECHANISM								
15	1.8060	5111340	Arm Assy., exhaust valve rocker (left)	} (includes clevis and pin) .....	6	8	12	16
15	1.8060	5111343	Arm Assy., exhaust valve rocker (right)		6	8	12	16
15	1.8080	5179954	Arm Assy., injector rocker		6	8	12	16
15	1.8130	5150312	Clevis, injector and exhaust valve rocker arm .....		18	24	36	48

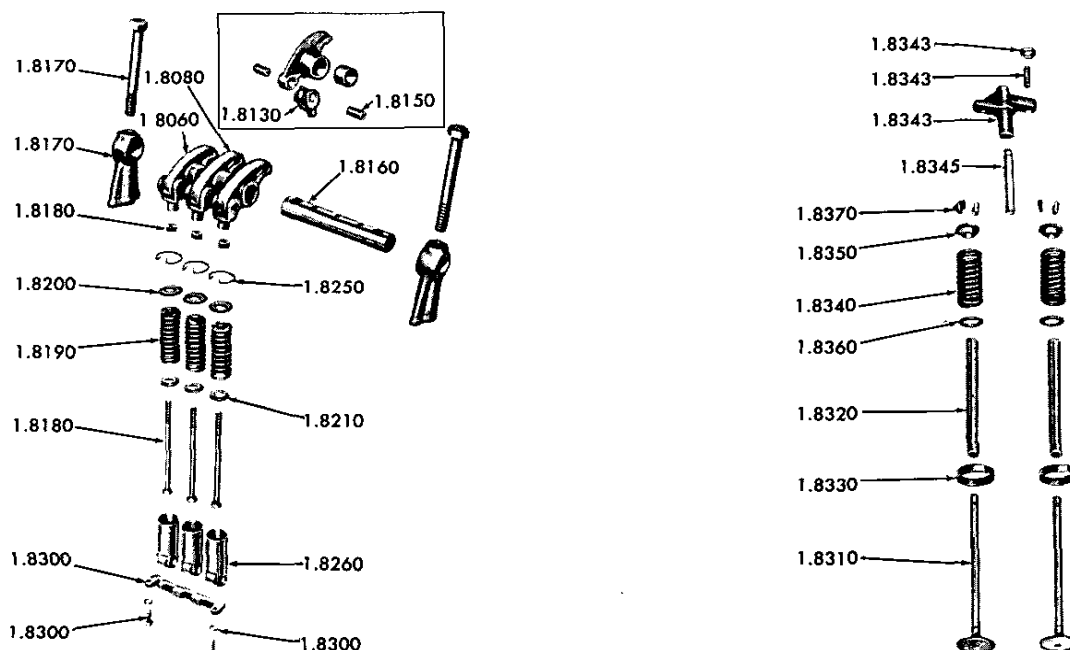


Fig. 15 - Valve Operating Mechanism



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
15	1.8150	5150314	Pin, injector and exhaust valve rocker arm clevis .....	18	24	36	48
15	1.8160	5150322	Shaft Assy., rocker .....	6	8	12	16
15	1.8170	5150324	Bracket, rocker shaft .....	12	16	24	32
15	1.8170	5150325	Bolt, rocker shaft bracket .....	12	16	24	32
15	1.8180	5128640	Rod, push .....	18	24	36	48
15	1.8180	5151601	Locknut, push rod .....	18	24	36	48
15	1.8190	5186858	Spring, push rod .....	18	24	36	48
15	1.8200	5150302	Seat, push rod spring (upper) .....	18	24	36	48
15	1.8210	5123250	Seat, push rod spring (lower) .....	18	24	36	48
15	1.8250	5150303	Retainer, push rod (snap ring) .....	18	24	36	48
15	1.8260	5115087	Follower Assy., cam .....	18	24	36	48
15	1.8300	5150298	Guide, cam follower .....	6	8	12	16
15	1.8300	443603	Bolt, 1/4"-20 x 3/4" hex. hd. ....	12	16	24	32
15	1.8300	103319	Lockwasher, 1/4" .....	12	16	24	32
15	1.8310	5195167	Valve, exhaust (includes locks) .....	24	32	48	64
6,15	1.8320	5119992	Guide, exhaust valve .....	24	32	48	64
6,15	1.8330	5119898	Insert, exhaust valve (standard) .....	24	32	48	64
6,15	1.8330	5195162	Insert, exhaust valve (.010" O.S.) .....	AR	AR	AR	AR
15	1.8340	5117561	Spring, exhaust valve .....	24	32	48	64
15	1.8343	5117565	Bridge, exhaust valve .....	12	16	24	32
15	1.8343	5112901	Screw, exhaust valve bridge adjusting .....	12	16	24	32
15	1.8343	5151601	Locknut, adjusting screw .....	12	16	24	32
15	1.8345	5117564	Guide, exhaust valve bridge .....	12	16	24	32
15	1.8350	5117563	Cap, exhaust valve spring .....	24	32	48	64
15	1.8360	5117562	Seat, exhaust valve spring .....	24	32	48	64
15	1.8370	5111337	Lock, exhaust valve spring (halves) .....	48	64	96	128
<b>ROCKER COVER</b>							
16	1.8450	5178381	Cover Assy., rocker (plain) .....	AR			
16,76	1.8450	5178382	Cover Assy., rocker (plain) .....		AR		AR
16	1.8450	5178383	Cover Assy., rocker (plain) .....			AR	
16	1.8450	5196747	Cover Assy., rocker (with filler) .....	AR			
16	1.8450	5196748	Cover Assy., rocker (with filler) .....		AR		AR
16	1.8450	5197133	Cover Assy., rocker (with filler) .....			AR	
16	1.8455	5150327	Gasket, rocker cover .....	2			
16	1.8455	5150328	Gasket, rocker cover .....		2		4
16	1.8455	5150329	Gasket, rocker cover .....			2	
16	1.8460	5157194	Bolt, rocker cover .....	4	4	8	8
16	1.8460	5150333	Washer, rocker cover bolt .....	4	4	8	8
16	1.8460	455532	Pin, 1/8" x 1" roll .....	4	4	8	8
-	-	5157192	Stud, rocker cover .....	4	4	8	8

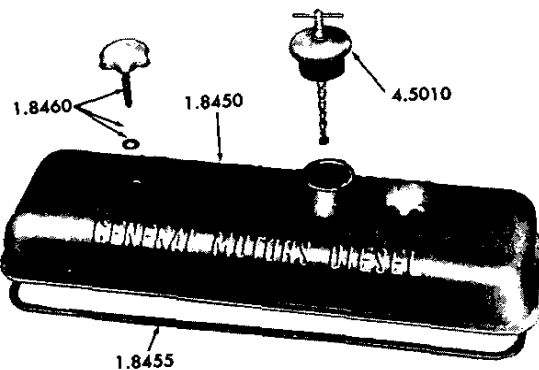


Fig. 16 - Rocker Cover

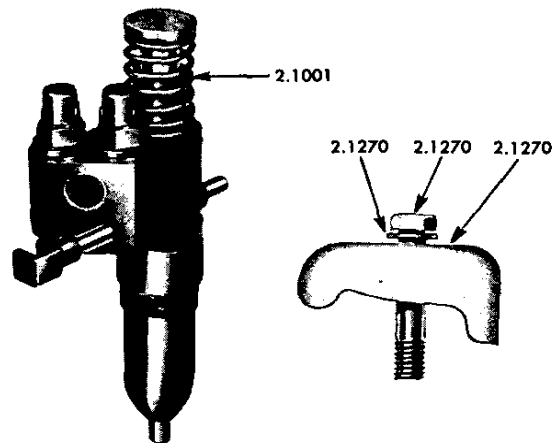


Fig. 17 - Fuel Injector and Clamp



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
FUEL INJECTOR							
17	2.1001	5228521	Injector Assy. (S55) .....	6	8	12	16
17	2.1001	5228522	Injector Assy. (S60) .....	6	8	12	16
17	2.1001	5228523	Injector Assy. (S70) .....	6	8	12	16
-	-	5226414	Cap, injector shipping .....	AR	AR	AR	AR
17	2.1270	5121259	Clamp, injector .....	6	8	12	16
17	2.1270	5150250	Washer, injector clamp .....	6	8	12	16
17	2.1270	179847	Bolt, injector clamp .....	6	8	12	16
6	2.1290	5150041	Tube, injector hole .....	6	8	12	16
6	2.1300	5160037	Ring, injector hole tube seal .....	6	8	12	16
FUEL PUMP							
13,18	2.2001	5184531	Pump Assy., fuel (includes indented items) .....	1	1	1	
-	-	5100305	Pump Assy., fuel (includes indented items) .....				1
-	-	5118219	Bolt (with seal-washer) .....	3	3	3	3
-	-	5195078	Overhaul Kit, fuel pump (includes oil seals, drive shaft, driven shaft, valve parts, pump gasket and shipping plugs) .....	AR	AR	AR	
18	2.2007	5150193	Gasket, fuel pump to blower .....	1	1	1	1
18	2.2070	5230007	Seal, fuel pump oil .....	2	2	2	2
18	2.2089	5181747	Shaft and Gear, fuel pump driven .....	1	1	1	
18	2.2093	5181746	Shaft and Gear, fuel pump drive .....	1	1	1	
-	-	5108444	Shaft, fuel pump drive .....				1
-	-	5182817	Gear, fuel pump drive .....				1
18	2.2089	5100313	Shaft and Gear, fuel pump driven .....				1
18	2.2130	5174973	Valve, fuel pump .....	1	1	1	2
18	2.2130	103709	Pin, 5/32" x 1" straight .....	1	1	1	1
18	2.2160	5184530	Spring, fuel pump valve retaining .....	1	1	1	1
18	2.2170	5174971	Plug, fuel pump valve .....	1	1	1	1
18	2.2180	5161003	Gasket, fuel pump valve plug .....	1	1	1	1
18	2.2220	5150199	Fork, fuel pump drive .....	1	1	1	1

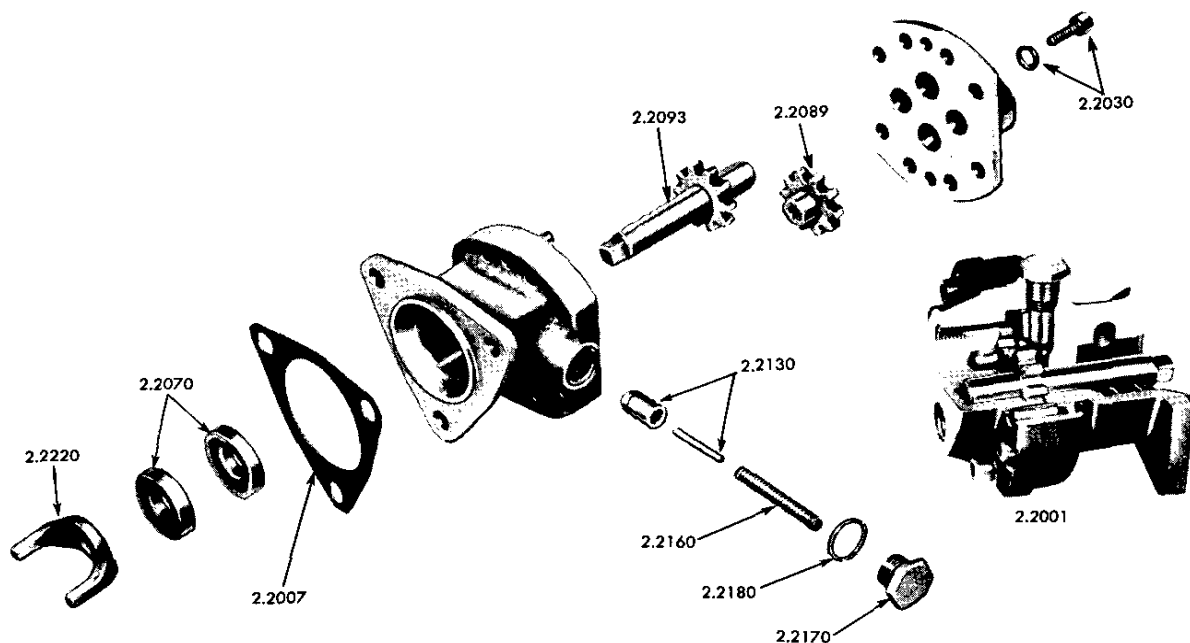
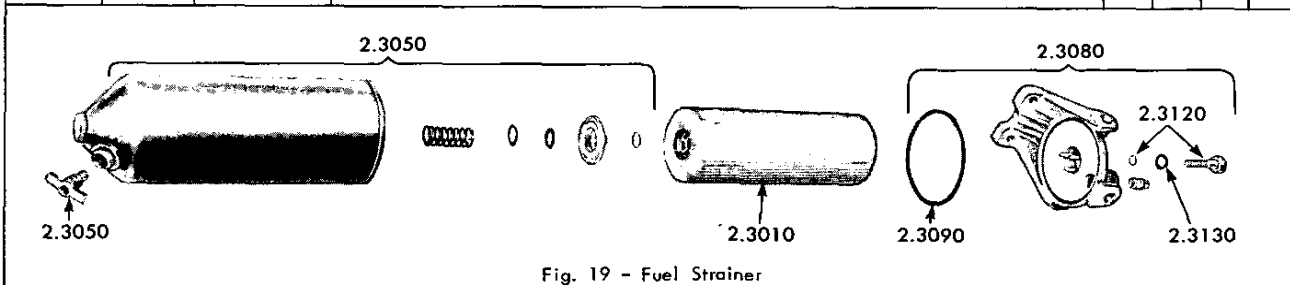


Fig. 18 - Fuel Pump

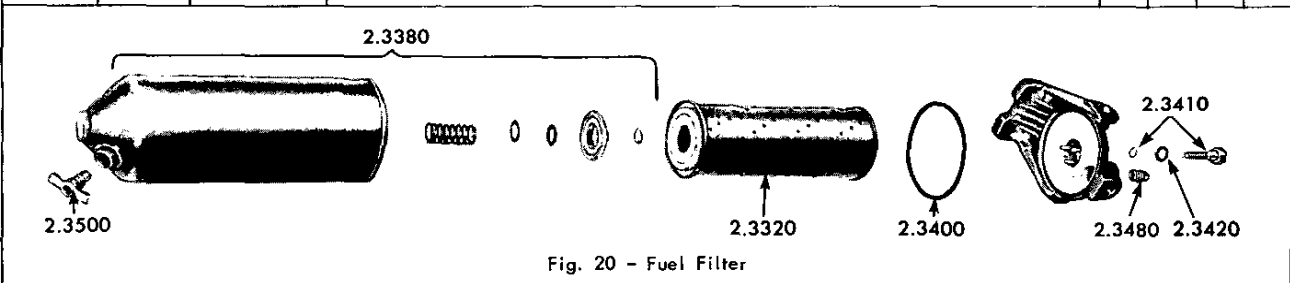


# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
FUEL FILTER							
3	2.3001	5575568	Strainer Assy., fuel (6" element)	1	1	1	1
3	2.3001	5575009	Strainer Assy., fuel (8" element)				
3	2.3001	5575570	Strainer Assy., fuel (9" element)				
19	2.3010	5574961	Element, fuel strainer (6") .....	1			
19	2.3010	5575032	Element, fuel strainer (8") .....		1		
19	2.3010	5574980	Element, fuel strainer (9") .....			1	1
19	2.3050	5577586	Shell, fuel strainer (6" element) .....	1			
19	2.3050	5575056	Shell, fuel strainer (8" element) .....		1		
19	2.3050	5574918	Shell, fuel strainer (9" element) .....			1	1
19	2.3050	103647	Draincock, 1/4" .....	1	1		
-	-	5575197	Decal (6" element shell) .....	1			
-	-	5575062	Decal (8" element shell) .....		1		
-	-	5574921	Decal (9" element shell) .....			1	1
-	-	179839	Bolt, 3/8" - 16 x 1" hex. hd. ....		2	2	
-	-	103321	Lockwasher, 3/8" .....		2	2	
-	-	117062	Nut, 3/8" - 16 hex. ....		2	2	
19	2.3080	5575789	Cover Assy., fuel strainer	1	1	1	1
19	2.3080	5575797	Cover Assy., fuel strainer				
19	2.3090	5574161	Gasket, fuel strainer cover	1	1		
19	2.3090	5571024	Gasket, fuel strainer cover			1	1



19	2.3120	5575790	Bolt, fuel strainer cover	1	1		
19	2.3120	5574121	Ring, fuel strainer cover bolt snap	1	1		
19	2.3130	1503536	Gasket, fuel strainer cover bolt	1	1		1
-	-	5122693	Bracket, fuel strainer and filter mounting		1	1	
-	-	179838	Bolt, 3/8" - 16 x 7/8" hex. hd.		3	3	
-	-	103321	Lockwasher, 3/8"		3	3	
21	2.3310	5574533	Filter Assy., fuel (8")	1	1		
21,76	2.3310	5575569	Filter Assy., fuel (8")			1	1
-	-	179838	Bolt, 3/8" - 16 x 7/8" hex. hd.			3	
-	-	179839	Bolt, 3/8" - 16 x 2" hex. hd.		2	2	
-	-	186619	Bolt, 3/8" - 16 x 1 1/8" hex. hd.	2	2	2	
-	-	103321	Lockwasher, 3/8"	AR	AR	AR	
-	-	117062	Nut, 3/8" - 16 hex.	2	2	AR	
20	2.3320	5574508	Element, fuel filter (8" paper, includes gasket)	1	1		
20	2.3320	5574979	Element, fuel filter (8" paper, includes gasket)			1	1
20	2.3380	5575169	Shell Assy., fuel filter	1	1		
20	2.3380	5574868	Shell Assy., fuel filter			1	1





# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5574516	Decal .....	1	1		
-	-	5574879	Decal .....			1	1
20	2.3400	5574161	Gasket, fuel filter cover shell .....	1	1		
20	2.3400	5571024	Gasket, fuel filter cover shell .....			1	1
20	2.3410	5574118	Screw, fuel filter cover .....	1	1		
20	2.3410	5574121	Snap Ring, fuel filter cover .....	1	1		
20	2.3420	1503536	Gasket, fuel filter cover screw .....	1	1		
20	2.3480	103878	Plug, 1/4" pipe (in cover) .....	2	2		
20	2.3500	103647	Draincock, fuel filter .....	1	1	1	1
<b>FUEL MANIFOLD CONNECTIONS</b>							
-	-	5111527	Pipe Assy., fuel (long) .....	6	8	12	16
-	-	5111526	Pipe Assy., fuel (short) .....	6	8	12	16
-	-	5117369	Connector, fuel pipe .....	12	16	24	32
-	-	5125108	Washer, fuel pipe connector (copper) .....	12	16	24	32
<b>FUEL LINES</b>							
The part number of fuel lines which are not listed may be obtained from your GM Diesel dealer or distributor, by furnishing the model number, unit number and type number (if shown) on the Option Plate on your engine.							
21,37	2.5050	-	Tube Assy., fuel strainer to pump .....	1	1	1	
-	-	188947	Elbow, 1/2" inv. fl. tube 90° .....	1	1	1	
-	-	5100325	Adaptor, fuel pump inlet .....				1
-	-	137426	Elbow, 5/8" inv. fl. tube 90° .....				1

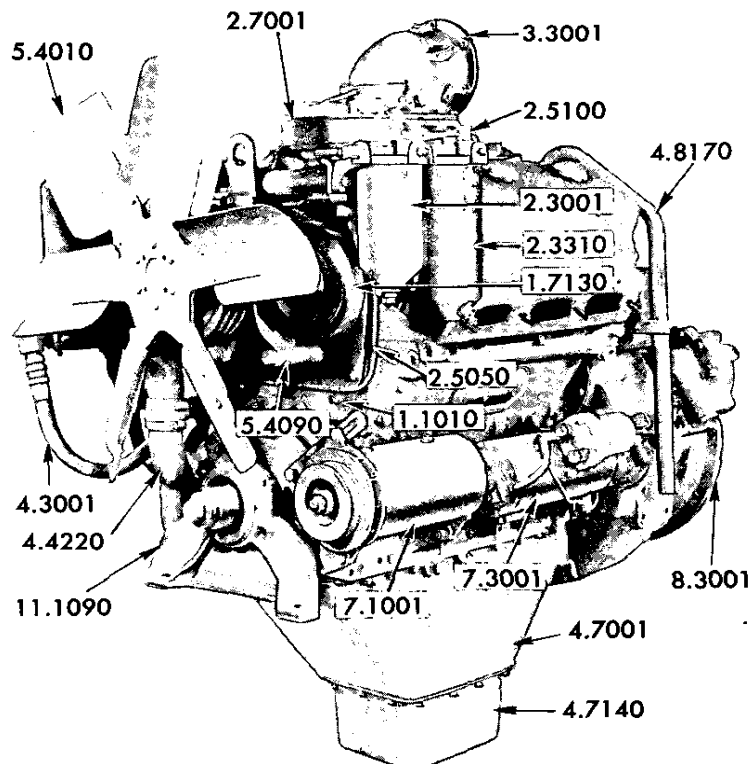


Fig. 21 - Typical Fan to Flywheel Engine



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
3,21	2.5100	-	Tube Assy., fuel pump to filter .....	1	1	1	1
-	-	444150	Tee, 3/8"-18 automotive pipe (filter outlet) .....				1
-	-	118755	Elbow, 3/8" fl. tube 90° .....				1
-	-	116332	Bushing, 3/8" x 1/4" red. pipe .....				2
-	-	118750	Connector, 3/8" fl. tube .....				1
-	-	137423	Elbow, 3/8" inv. fl. tube 90° .....	2	2	2	
-	-	5112241	Clamp, fuel pump to filter tube .....	2	2	2	
-	-	110500	Screw, #10-24 x 1/2" rd. hd. sl. ....	1	1	1	
-	-	120217	Lockwasher, #10 .....	1	1	1	
-	-	110633	Nut, #10-24 hex. ....	1	1	1	
3	2.5150	-	Tube Assy., filter to fuel manifold (right bank) .....	1	1	1	1
3	2.5150	-	Tube Assy., filter to fuel manifold (left bank) .....	1	1	1	1
-	-	190367	Elbow, 1/4" street 90° .....				1
-	-	118755	Elbow, 3/8" fl. tube 90° .....				1
-	-	118750	Connector, 3/8" fl. tube .....				1
-	-	137423	Elbow, 3/8" inv. fl. tube 90° .....	2	2	2	
-	-	137407	Connector, 3/8" inv. fl. tube .....	2	2	2	
-	-	5112241	Clamp, filter to fuel manifold tube .....	4	4	4	
-	-	110500	Screw, #10-24 x 1/2" rd. hd. sl. ....	2	2	2	
-	-	120217	Lockwasher, #10 .....	2	2	2	
-	-	110633	Nut, #10-24 hex. ....	2	2	2	
-	-	-	Tube Assy., fuel drain cross-over .....	1	1	1	
-	-	3290459	Clip, cross-over tube to lifter bracket .....	1	1	1	
-	-	5124232	Tee, 5/16" inv. fl. tube (restricted) .....	1	1	1	
-	-	143343	Elbow, 5/16" inv. fl. tube 90° .....	1	1	1	
-	-	116332	Bushing, reducing pipe .....	1	1	1	
-	-	444867	Plug, 3/8" pipe .....	1	1	1	
47	2.5215	-	Tube Assy., fuel drain .....	1	1	1	
-	-	5117746	Tube Assy., 1/2" I.D. x 13 3/4" flex. (fuel inlet) .....				1
76	2.5215	5188017	Tube Assy., 5/8" I.D. x 10 15/16" flex. (to junction block) .....				1
-	-	137418	Union, 5/8" inv. fl. tube .....				1
-	-	118752	Connector, 1/2" fl. tube .....				1
-	-	187343	Connector, 5/16" inv. fl. tube .....	1	1	1	
-	-	5125782	Tube Assy., 1/2" I.D. x 14" L., flex. (fuel return) .....	1	1	1	
37	2.5215	5118782	Tube Assy., 1/4" I.D. x 14" L., flex. (fuel return) .....	1	1	1	
-	-	5100247	Tube Assy., fuel return (dev. L. 21.4") .....				1
-	-	5100248	Tube Assy., fuel return (dev. L. 30.3") .....				1
-	-	5116440	Fitting, restriction (.070) .....				2
-	-	187343	Connector, 5/16" inv. fl. tube (in junction block) .....				2
-	-	5128610	Tee, 5/16" inv. fl. tube restricted (fuel drain) .....	1	1	1	
-	-	116332	Bushing, 3/8" - 1/4" red. pipe .....	1	1	1	
-	-	5126977	Block, fuel system junction .....		1		
-	-	5100246	Block, fuel system junction .....				1
<b>MECHANICAL GOVERNOR</b>							
The variety of mechanical governors available makes it impractical to list part numbers. For complete interpretation of part requirements, furnish your GM Diesel dealer or distributor the model, unit number, and governor type number.							
3,21,25	2.7001	-	Governor Assy., mechanical .....	1	1	1	
22	2.7001	186630	Bolt, 1/4" - 20 x 5/8" hex. hd. ....	4	4	4	
22	2.7001	179827	Bolt, 5/16" - 18 x 2 1/4" hex. hd. ....	7	7	7	
22	2.7001	186271	Bolt, 5/16" - 18 x 3 3/4" hex. hd. ....	1	1	1	
22	2.7001	186272	Bolt, 5/16" - 18 x 4" hex. hd. ....	1	1	1	
22	2.7001	187512	Bolt, 5/16" - 18 x 5 1/4" hex. hd. ....	1	1	1	
22	2.7001	120392	Washer, 1/4" flat .....	4	4	4	
22	2.7001	5155596	Washer, 5/16" flat .....	2	2	2	
22	2.7001	103319	Lockwasher, 1/4" .....	4	4	4	
22	2.7001	103320	Lockwasher, 5/16" .....	8	8	8	
22	2.7010	5126499	Gasket, governor to blower .....	1	1	1	
22	2.7030	5124333	Cover, governor fuel rod .....	2	2	2	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
22	2.7030	5124355	Hose, 1" I.D. x 13/16" L. ....	2	2	2	
22	2.7030	111612	Clamp, 1" ....	2	2	2	
START OF GOVERNOR ASSEMBLY							
-	-	5117865	Cover Assy., variable speed governor } (includes lever cam,	1	1	1	
-	-	5127729	Cover Assy., limiting speed governor } bearings and shaft)	1	1	1	
22	2.7045	132264	Bolt, 1/4" - 20 x 3/4" fil. hd. (variable speed) .....	6	6	6	
22	2.7045	132264	Bolt, 1/4" - 20 x 3/4" fil. hd. (limiting speed) .....	7	7	7	
22	2.7045	5183701	Bolt, 1/4" - 20 x 5/8" drilled hd. ....	1	1	1	
22	2.7045	103319	Lockwasher, 1/4" ....	8	8	8	
22	2.7050	5117864	Cover Assy., governor (variable) } (includes bearing) .....	1	1	1	
-	-	5127259	Cover Assy., governor (limiting) }	1	1	1	
22	2.7051	5117899	Gasket, governor to cover .....	1	1	1	
22	2.7095	5117933	Shaft Assy., governor throttle (variable speed) .....	1	1	1	
-	-	5117928	Shaft Assy., governor throttle (limiting speed) .....	1	1	1	
22	2.7095	113500	Pin, #1 x 7/8" taper .....	1	1	1	
-	-	148402	Bearing, governor throttle shaft .....	1	1	1	
-	-	5127267	Bushing, governor shutdown shaft (limiting speed) .....	1	1	1	
-	-	5127213	Spring, governor shutdown shaft return (limiting speed) .....	1	1	1	
22	2.7117	5128651#	Spring, governor shutdown shaft return (variable speed) .....	1	1	1	
-	-	5126792	Bolt, governor shutdown shaft return spring .....	1	1	1	
-	-	5127212	Shaft, governor shutdown (limiting speed) .....	1	1	1	
22	2.7130	5117927	Pin, governor fulcrum lever .....	1	1	1	
22	2.7140	5176557	Seal Ring, governor throttle shaft .....	1	1	1	
-	-	5182977	Seal Ring, governor throttle shaft (limiting speed) .....	1	1	1	
22	2.7150	5153060	Retainer, throttle shaft packing (variable speed) .....	2	2	2	
-	-	5153060	Retainer, throttle shaft packing (limiting speed) .....	1	1	1	
22	2.7150	5174429	Ring, throttle shaft retainer snap (limiting speed) .....	1	1	1	
-	-	5183042#	Lever, governor cover stub shaft (limiting speed) .....	1	1	1	
22,25	2.7165	5158432#	Lever, governor cover throttle shaft (variable speed) .....	1	1	1	
-	-	5151519#	Lever, governor cover throttle shaft (limiting speed) .....	1	1	1	
-	-	5178581	Retainer Ring, governor cover cam .....	1	1	1	
-	-	5151487	Washer, governor cover cam .....	1	1	1	
-	-	5124426	Housing Assy., governor control (includes tube and pin) .....	1	1	1	
22	2.7235	5150942	Pin, dowel (governor control housing to cover) .....	2	2	2	
22	2.7235	117920	Plug, 1 1/16" expansion .....	1	1	1	
22	2.8235	5124332	Tube, control link cover (1 5/16" L.) .....	2	2	2	
-	-	5117926	Shaft Assy., governor operating (includes 5117934 shaft, 457187 bearing, 5159080 washer, 5117925 lever, 5150898 adjusting screw, 122161 nut and 5150943 pin) .....	1	1	1	
22	2.7255	5117934	Shaft, governor operating .....	1	1	1	
22	2.7260	457187	Bearing, governor operating shaft - upper .....	1	1	1	
22	2.7260	5159080	Washer, governor operating shaft bearing .....	1	1	1	
22	2.7260	113903	Screw, #10 - 24 x 7/16" rd. hd. sl. ....	1	1	1	
22	2.7260	120391	Washer, #10 flat .....	1	1	1	
22	2.7260	115545	Lockwasher, #10 int. tooth .....	1	1	1	
22	2.7270	954987	Bearing, governor operating shaft - lower .....	1	1	1	
22	2.7280	5117925	Lever, governor operating shaft .....	1	1	1	
22	2.7280	5150898	Screw, gap adjusting .....	1	1	1	
22	2.7280	122161	Nut, 1/4" - 28 .....	1	1	1	
22	2.7290	5185605	Fork, governor operating shaft .....	1	1	1	
-	-	139013	Screw, 1/4" - 28 x 1/2" set .....	1	1	1	
22	2.7300	5150943	Pin, governor operating shaft lever .....	1	1	1	
22	2.7310	5150394	Lever Assy., governor differential (includes pin) .....	1	1	1	
22	2.7310	5150941	Washer, governor differential lever .....	1	1	1	
22	2.7310	142583	Retainer, 13/64" (spring) .....	1	1	1	
22	2.7312	5117210	Link, governor operating lever connecting .....	1	1	1	
22	2.7312	5150941	Washer, governor operating lever connecting link .....	1	1	1	
22	2.7312	142583	Retainer, 13/64" (spring) .....	1	1	1	
22	2.7315	5150894	Pin, governor differential lever .....	1	1	1	
22	2.7317	5127373	Lever Assy., injector control tube to governor link (includes bearings)	1	1	1	

#Items marked thus not included in governor assembly.



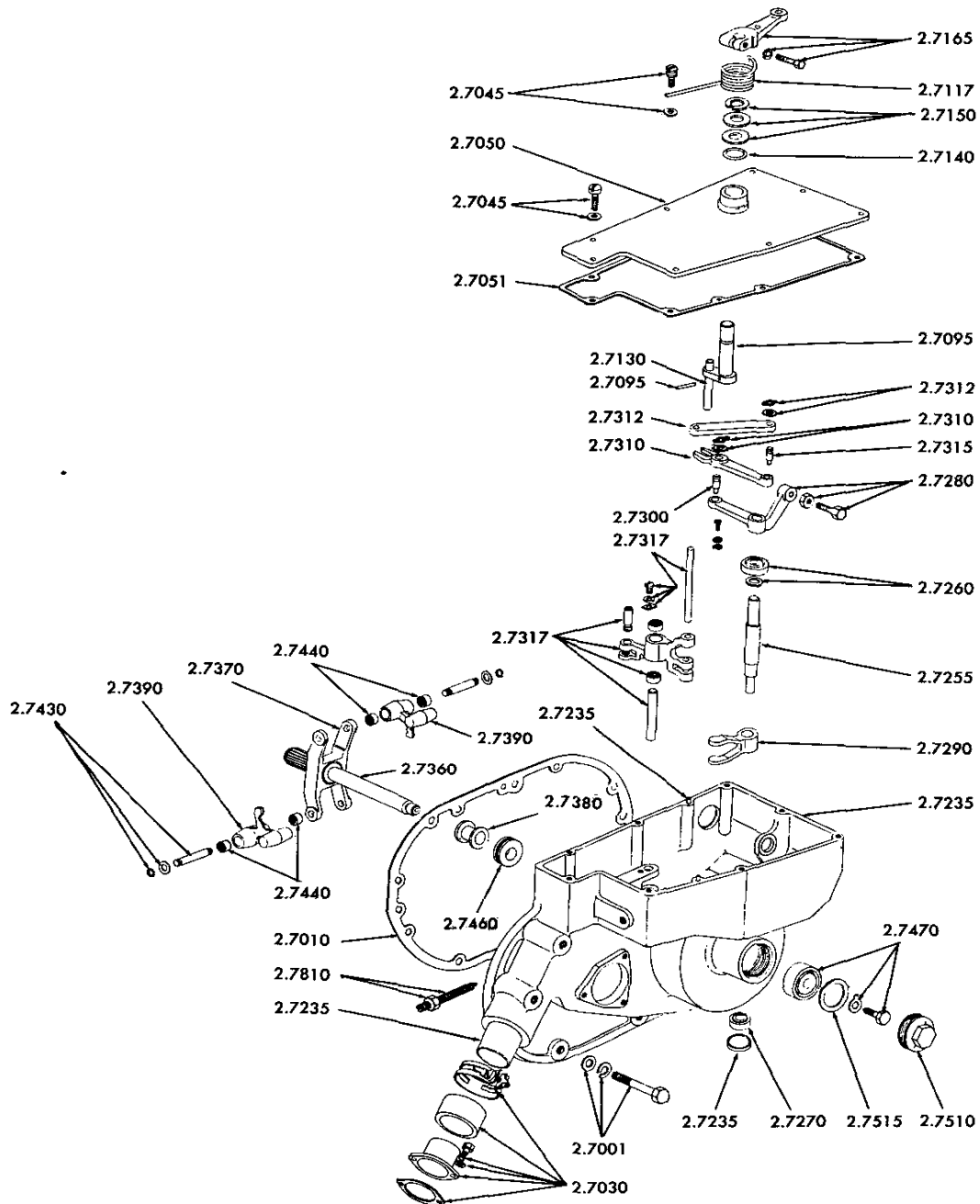


Fig. 22 - Mechanical Governor



# G M D I E S E L

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
22	2.7317	447196	Bearing, injector control tube to governor link lever (3/8" long)	2	2	2	
22	2.7317	5117693	Pin, 5/16" x 1" L. (injector control tube to governor link) .....	1	1	1	
22	2.7317	5127375	Pin, 5/16" x 2 9/16" L. (injector control tube to governor link and governor operating lever connecting link) .....	1	1	1	
22	2.7317	5112157	Pin, 3/8" x 1 29/32" L. (injector control tube to governor link lever) .....	1	1	1	
22	2.7317	5150885	Washer .....	2	2	2	
22	2.7317	5122263	Clip, injector control tube to governor link lever shaft lock .....	1	1	1	
22	2.7317	113903	Screw, #10 - 24 x 7/16" rd. hd. sl. ....	1	1	1	
22	2.7317	120217	Lockwasher, #10 .....	1	1	1	
-	-	5122164	Carrier and Weight Assy., governor (variable speed) (single weight) (includes indented items).....	1	1	1	
-	-	5122163	Carrier and Weight Assy., governor (limiting speed) (double weight) (includes indented items) .....	1	1	1	
-	-	5174451	Shaft and Carrier Assy. (variable speed) } (includes shaft	1	1	1	
-	-	5183624	Shaft and Carrier Assy. (limiting speed) } and carrier) .....	1	1	1	
22	2.7360	5150923	Shaft, governor weight carrier .....	1	1	1	
22	2.7370	5185606	Carrier, governor weight (variable speed) .....	1	1	1	
-	-	5184336	Carrier, governor weight (limiting speed) .....	1	1	1	
22	2.7380	5117193	Riser, governor .....	1	1	1	
22	2.7390	5111979	Weight Assy., governor (includes bearing) (variable speed) (single weight).....	1	1	1	
-	-	5117737	Weight Assy., governor (limiting speed) (double weight) .....	1	1	1	
-	-	5151059	Screw, governor weight set (limiting speed) .....	1	1	1	
22	2.7430	5185154	Shaft, governor weight (ring groove) (variable speed).....	2	2	2	
-	-	5183632	Shaft, governor weight (center drilled for set screw) (limiting speed) .....	2	2	2	
22	2.7430	5151487	Washer, governor weight shaft .....	4	4	4	
22	2.7430	5178581	Ring, governor weight shaft retainer (with 5185154) .....	4	4	4	
22	2.7440	447196	Bearing, governor weight (variable speed) .....	4	4	4	
22	2.7460	451905	Bearing, governor weight riser thrust .....	1	1	1	
22	2.7470	954716	Bearing, governor weight shaft end .....	1	1	1	
22	2.7470	5150884	Screw, bearing retainer .....	1	1	1	
22	2.7470	5150897	Lockwasher, bearing retainer .....	1	1	1	
-	-	5150941	Washer, bearing retainer .....	1	1	1	
22	2.7510	5117297	Cap, governor weight housing .....	1	1	1	
22	2.7515	5165221	Gasket, governor weight housing cap .....	1	1	1	
23	2.7540	5151604	Spring, governor low speed (limiting speed) .....	1	1	1	
23	2.7550	5122269	Spring, governor high speed (limiting speed) .....	1	1	1	
-	-	5113876	Spring, governor high speed (limiting speed) (dual high speed) ....	1	1	1	
23	2.7560	5182555	Plunger, governor low speed spring (limiting speed) .....	1	1	1	
-	-	5113872	Plunger, governor low speed spring (limiting speed) (dual high speed) .....	1	1	1	
23	2.7570	5150892	Seat, governor low speed spring (limiting speed) .....	1	1	1	
23	2.7580	5117931	Cap, governor low speed (limiting speed) .....	1	1	1	
23	2.7590	5182556	Screw, governor low speed spring adjusting (limiting speed) .....	1	1	1	
-	-	5150891	Screw, governor low speed spring adjusting (limiting speed) (dual high speed) .....	1	1	1	
23	2.7590	122161	Nut, 1/4" - 28 hex. ....	1	1	1	
23	2.7610	5182557	Retainer, governor high speed spring (limiting speed) .....	1	1	1	

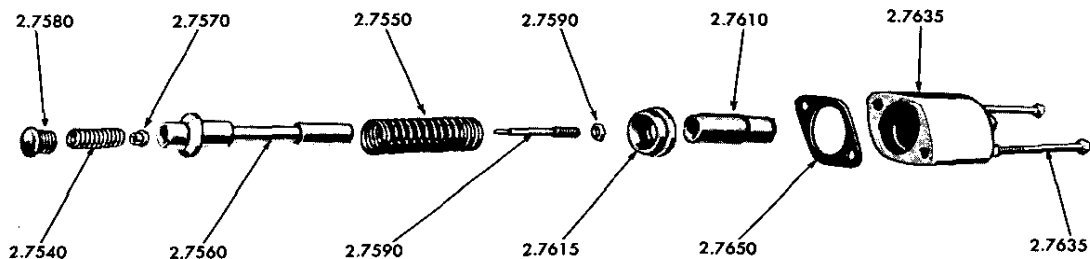
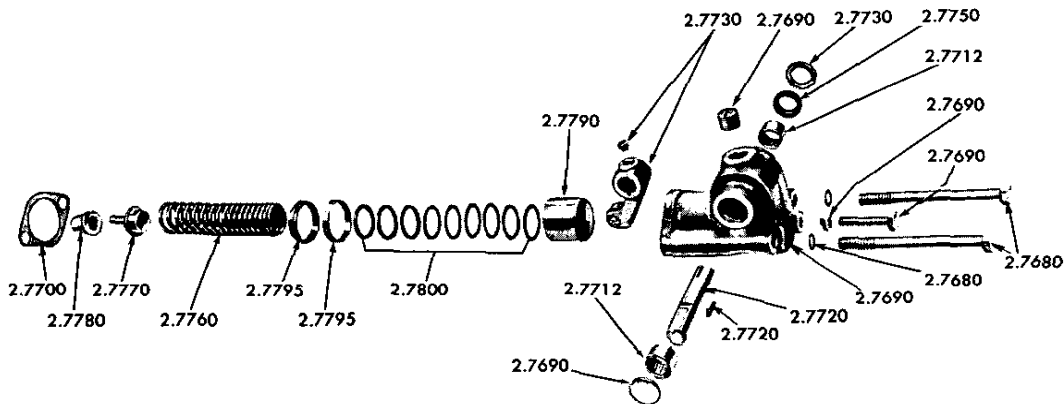


Fig. 23 - Limiting Speed Governor Spring and Housing



**G M D I E S E L**

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5113867	Retainer, governor high speed spring	1	1	1	
-	-	5125603	Piston, governor speed adjusting	1	1	1	
-	-	5235604	Sleeve, governor speed adjusting	1	1	1	
-	-	5114167	Ring Seal, governor speed adjusting piston	1	1	1	
23	2.7615	5182558	Locknut, governor high speed spring retainer (limiting speed) ....	1	1	1	
-	-	5124551	Guide, governor high speed spring	1	1	1	
-	-	5123949	Cover, governor high speed spring	1	1	1	
-	-	5124313	Bolt, 5/16" - 24 x 2" adjusting	1	1	1	
23	2.7635	5182559	Housing, governor spring adjusting screw (limiting speed) .....	1	1	1	
-	-	5113868	Housing, governor speed adjusting screw	1	1	1	
23	2.7635	274386	Bolt, 5/16" - 18 x 3 1/4" hex. hd.	1	1	1	
23	2.7635	455520	Bolt, 5/16" - 18 x 3 1/2" hex. hd. (limiting speed) .....	1	1	1	
23	2.7650	5152944	Gasket, governor high speed spring housing	AR	AR	AR	
-	-	5126841	Housing Assy., governor (variable speed spring) (includes indented items) .....	1	1	1	
24	2.7680	445520	Bolt, 5/16" - 18 x 3 1/2" hex. hd. ....	2	2	2	
24	2.7680	5155596	Lockwasher, 5/16" .....	2	2	2	
24	2.7690	5126060	Housing, governor variable speed spring .....	1	1	1	
24	2.7690	5126789	Plug, governor variable speed spring housing .....	1	1	1	
24	2.7690	138632	Bolt, 1/4" - 20 x 1 1/4" hex. socket hd. (idle speed adjusting)...	1	1	1	
24	2.7690	191089	Nut, 1/4" - 20 hex. ....	1	1	1	
24	2.7700	5152944	Gasket, governor variable speed spring housing .....	1	1	1	
24	2.7712	148402	Bearing, governor variable speed spring lever shaft .....	2	2	2	
24	2.7720	5173964	Shaft, governor variable speed spring lever .....	1	1	1	
24	2.7720	103904	Key, 3/32" x 1/2" woodruff .....	2	2	2	
24	2.7730	5179102	Lever Assy., variable speed spring (includes roller) .....	1	1	1	
24	2.7730	223065	Screw, 5/16" - 24 x 1/4" set .....	1	1	1	
24	2.7730	5152932	Washer, governor variable speed spring lever .....	1	1	1	
-	2.7750	5176557	Packing, governor variable speed spring lever shaft .....	1	1	1	
24	2.7760	5122270	Spring, governor variable speed .....	1	1	1	
24	2.7770	5119732	Plunger, governor variable speed spring .....	1	1	1	
24	2.7780	5152939	Guide, governor variable speed spring plunger .....	1	1	1	
24	2.7790	5152941	Retainer, governor variable speed spring .....	1	1	1	
24	2.7795	5171784	Stop, governor variable speed spring retainer (with step) .....	AR	AR	AR	
24	2.7795	5174430	Stop, governor variable speed spring retainer (with gap) .....	AR	AR	AR	
24	2.7800	5152962	Shim, governor variable speed spring (.010") .....	AR	AR	AR	
24	2.7800	5153904	Shim, governor variable speed spring (.078") .....	AR	AR	AR	
22	2.7810	5126664	Screw Assy., governor buffer .....	1	1	1	
22	2.7810	9414568	Nut, 3/8" - 24 hex. lock .....	1	1	1	



**Fig. 24 - Variable Speed Governor Spring and Housing**



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
HYDRAULIC GOVERNOR							
-	-	5128528	Governor Assy., hydraulic (engine)	1	1	1	
76	2.8030	5129758	Governor Assy., hydraulic (engine)				1
-	-	5188502	Governor Assy., hydraulic (output shaft) } (includes indented items) .....	1	1	1	
-	-	186624	Bolt, 5/16" - 24 x 1 1/4" .....	4	4	4	
-	-	106327	Bolt, 5/16" - 18 x 1 3/8" hex. hd. ....	4	4	4	4
-	-	103320	Lockwasher, 5/16" .....	4	4	4	4
25,26	2.8035	5126499	Gasket, governor to blower .....	1	1	1	1
-	-	3224773	Gasket, governor to governor cover .....	1	1	1	1
-	-	3224773	Gasket, governor to torque converter .....	1	1	1	
25	2.8040	5194793	Cover, governor .....	1	1	1	1
25	2.8040	453141	Screw, #10-32 x 1 3/8" hex. socket hd. ....	3	3	3	3
25	2.8040	120217	Lockwasher, #10 .....	3	3	3	3
25	2.8040	132930	Screw, #10 - 32 x 1 1/2" rd. hd. sl. ....	3	3	3	
25	2.8045	3249110	Gasket, governor cover .....	1	1	1	1
-	-	5195151	Sub-cap Assy., governor (includes next 12 indented items) ....	1	1	1	1
25	2.8050	5193027	Sub-cap, governor .....	1	1	1	1
25	2.8070	5193028	Rod, governor fuel .....	1	1	1	1
25	2.8085	5193030	Cover, governor fuel rod spring .....	1	1	1	1
25	2.8085	187828	Screw, #10 - 32 x 1/2" hex. socket hd. ....	2	2	2	2
25	2.8085	120217	Lockwasher, #10 .....	2	2	2	2
25	2.8086	5193033	Gasket, governor fuel rod spring cover .....	1	1	1	1
25	2.8120	5193460	Spring, governor fuel rod short .....	1	1	1	1
25	2.8140	5193029	Seat, governor fuel rod spring .....	1	1	1	1
-	-	5193031	Plug, governor sub-cap .....	1	1	1	1
25	2.8180	3249155	Screw, governor load limit .....	1	1	1	1
25	2.8180	5194069	Washer (1/4" copper) .....	1	1	1	1
25	2.8180	190204	Nut, 1/4" - 28 hex. ....	1	1	1	1
25	2.8190	5193025	Housing Assy., governor (includes governor speed adjusting terminal sleeve and governor oil pump driven gear to base stud) .....	1	1	1	1
25	2.8190	444687	Plug, 1/8" pipe .....	1	1	1	1
25	2.8200	3292039	Plug, governor housing dummy hole .....	1	1	1	1
25	2.8210	5156913	Gasket, governor housing dummy hole plug .....	2	2	2	4
25	2.8260	3249110	Gasket, governor sub-cap to housing .....	1	1	1	1
25	2.8280	3249134	Shaft, governor speed adjusting (3 3/8" L.) .....	1	1	1	
25	2.8280	5196759	Shaft, governor speed adjusting .....				1
25	2.8280	107762	Pin, 3/32" x 5/8" cotter .....	1	1	1	1
25	2.8350	3249111	Seal, governor speed adjusting shaft oil .....	4	4	4	2
25	2.8355	5195399	Spring, speed adjusting shaft torsion .....	1	1	1	1
25	2.8360	3304158	Sleeve Assy., governor speed adjusting shaft (includes bushing) .....	1	1	1	1
-	-	3304052	Bushing, governor speed adjusting shaft sleeve .....	1	1	1	2
25	2.8365	3249149	Cap, governor speed adjusting shaft spacer .....	1	1	1	1
25	2.8367	5156913	Gasket, governor speed adjusting shaft spacer cap .....	1	1	1	1
25	2.8410	3249139	Lever, governor speed adjusting floating .....	1	1	1	1
25	2.8410	5194792	Stop, governor speed adjusting floating lever (low speed) (with engine governor) .....	1	1	1	1
25	2.8410	5194484	Stop, governor speed adjusting floating lever (with output shaft governor) .....	1	1	1	
25	2.8410	5194069	Washer, 1/4" copper .....	1	1	1	1
25	2.8410	5194495	Nut, 1/4" - 28 (elastic stop) .....	1	1	1	1
25	2.8420	5193206	Lever, governor speed adjusting .....	1	1	1	1
25	2.8420	3249137	Pin, governor speed adjusting lever .....	2	2	2	2
25	2.8435	3249145	Fork, governor speed adjusting linkage spring .....	1	1	1	1
25	2.8435	3249154	Lockwire, governor speed adjusting linkage spring fork .....	1	1	1	1
25	2.8440	5196110	Bracket, governor speed adjusting lever .....	1	1	1	1
25	2.8440	180016	Bolt, 1/4" - 20 x 1/2" hex. hd. (speed droop adjusting) .....	1	1	1	1
25	2.8440	120423	Lockwasher, 1/4" int. tooth .....	1	1	1	1
-	-	3304054	Lockwasher (1/4") governor speed adjusting lever screw .....	1	1	1	1
25	2.8450	3249153	Lever, governor speed adjusting terminal .....	1	1	1	1
25	2.8450	137171	Pin, 3/32" x 1" cotter .....	2	2	2	2



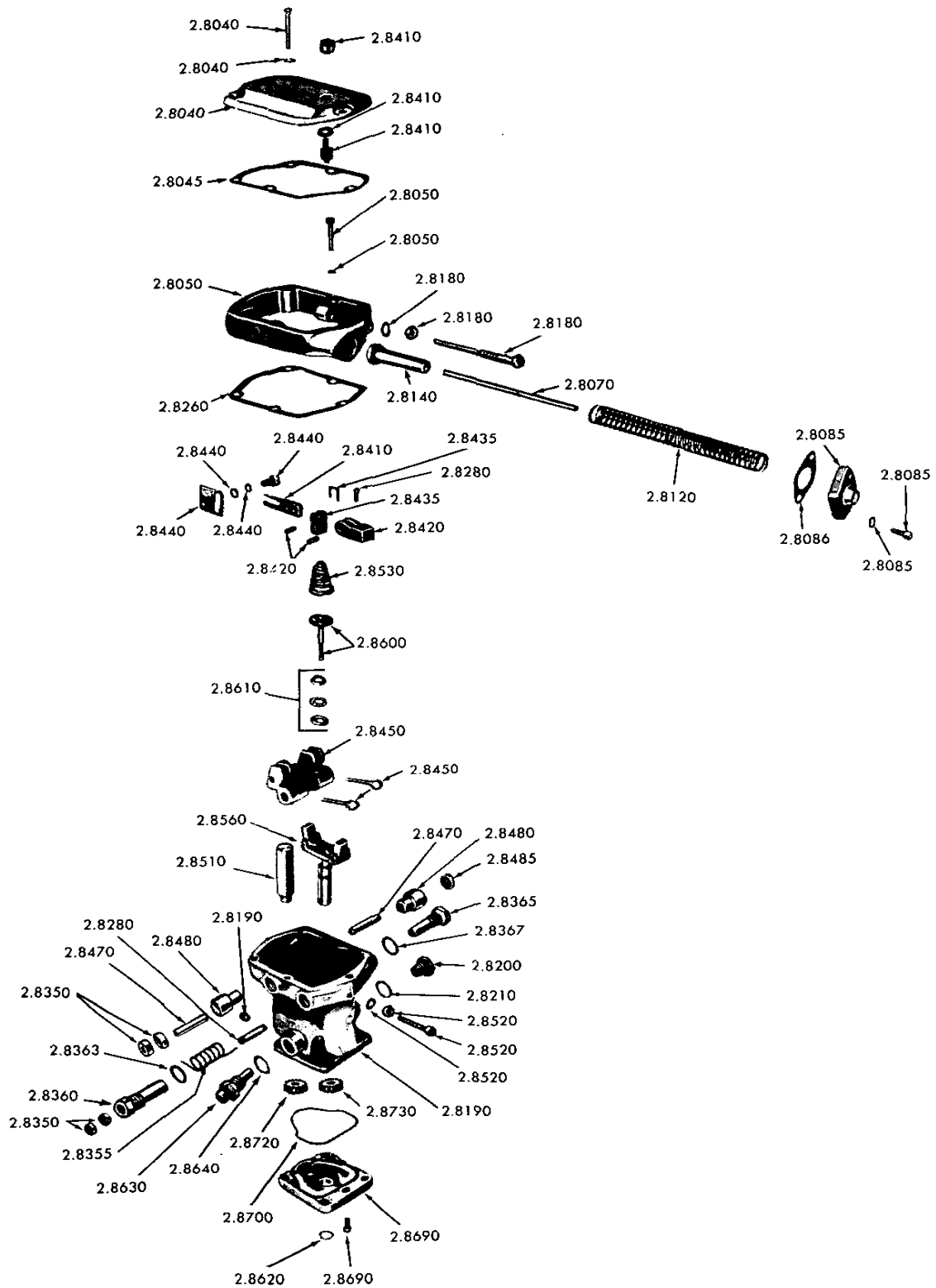


Fig. 25 - Hydraulic Governor



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
25	2.8470	5193070	Shaft, governor speed adjusting terminal (2 13/16" L.) .....	1	1	1	1
25	2.8470	3249157	Shaft, governor speed adjusting terminal (1 19/32" L.) .....	1	1	1	1
25	2.8480	3304152	Sleeve Assy., governor speed adjusting terminal .....	2	2	2	2
25	2.8485	3249167	Plug, governor speed adjusting terminal sleeve (cup) .....	2	2	2	1
25	2.8510	3291732	Piston, governor servo motor.....	1	1	1	1
25	2.8520	5193635	Screw (1/4" - 28 x 2 3/8") governor hi-speed stop .....	1	1	1	
25	2.8520	3304053	Screw (#10 - 32 x 1 1/8") governor hi-speed stop .....	1	1	1	1
25	2.8520	5194070	Washer (#10 copper) .....	1	1	1	
25	2.8520	120614	Nut, #10-32 hex. ....	1	1	1	1
25	2.8520	5194069	Washer (1/4" copper) .....	1	1	1	
25	2.8530	5194255	Spring, governor speeder .....	1	1	1	1
25	2.8560	5197011	Ball Head Assy., governor .....	1	1	1	
-	-	5193645	Ball Head Assy., governor .....				1
25	2.8600	5194257	Plunger Assy., governor pilot valve (includes seat) .....	1	1	1	1
25	2.8610	5157328	Bearing, governor pilot valve plunger thrust .....	1	1	1	1
25	2.8620	5192787	Ring, governor drive shaft retaining .....	1	1	1	1
25	2.8630	5195202	Valve Assy., governor relief (engine governor) (includes valve sleeve, plunger, stop sleeve, spring and pin) .....	1	1	1	1
-	-	5192300	Valve Kit, governor relief (engine governor) (includes valve plunger, stop sleeve, spring and pin) .....	1	1	1	1
25	2.8640	5196913	Gasket, governor relief valve (engine governor) .....	1	1	1	1
25	2.8690	5192760	Base, governor .....	1	1	1	1
-	-	117043	Pin, 3/16" x 11/16" straight .....	2	2	2	2
25	2.8690	132188	Screw, #12-24 x 1/2" fil. hd. ....	3	3	3	3
25	2.8700	3307753	Ring, governor oil pump housing seal .....	1	1	1	1
25	2.8720	3249119	Gear, governor oil pump drive (engine governor) .....	1	1	1	1
25	2.8730	3249118	Gear, governor oil pump driven (engine governor) .....	1	1	1	1
-	-	5193653	Spacer, governor oil pump driven gear (with output shaft governor) .....	1	1	1	
-	-	3249147	Stud, governor oil pump driven gear to base .....	1	1	1	1
26	2.8780	5127234	Housing, governor drive .....	1	1	1	
26	2.8780	5127976	Housing, governor drive (rear blower) .....				1
26	2.8780	5127235	Housing, governor drive (front blower) .....				1
26	2.8780	5127624	Cover, governor drive housing .....	1	1	1	1
26	2.8780	5127625	Cover, governor drive housing (rear blower) .....				1
26	2.8780	186625	Bolt, 5/16" - 18 x 7/8" hex. hd. ....	2	2	2	6
26	2.8780	5127424	Gasket, governor drive housing cover .....	1	1	1	2
26	2.8780	5124332	Cover, control link .....	2	2	2	4
-	-	5150942	Pin, dowel .....	2	2	2	4
-	-	5155596	Washer, 5/16" copper (flat) .....	3	3	3	6
-	-	179827	Bolt, 5/16" - 18 x 2 1/4" hex. hd. ....	6	6	6	12
26	2.8780	186271	Bolt, 5/16" - 18 x 3 3/4" hex. hd. ....	1	1	1	2
26	2.8780	186272	Bolt, 5/16" - 18 x 4" hex. hd. ....	1	1	1	2
26	2.8780	186274	Bolt, 5/16" - 18 x 5" hex. hd. ....	1	1	1	2
26	2.8780	187512	Bolt, 5/16" - 18 x 5 1/4" hex. hd. ....	1	1	1	2
26	2.8780	103320	Lockwasher, 5/16" .....	AR	AR	AR	AR
-	-	5127663	Shaft Assy., governor driven (includes shaft, sleeve and bearing) .....	1	1	1	1
26	2.8795	3224084	Shaft, governor driven .....	1	1	1	1
26	2.8795	274900	Ring, governor driven shaft retaining .....	1	1	1	1
26	2.8800	5127664	Sleeve, governor drive shaft .....	1	1	1	1
26	2.8810	954498	Bearing, governor driven shaft .....	1	1	1	1
26	2.8811	5127757	Shaft Assy., control link operating .....	1	1	1	1
26	2.8811	5127441	Bushing, governor control link shaft .....	1	1	1	
26	2.8811	5127612	Ring, governor control link shaft seal .....	1	1	1	
26	2.8811	5187641	Washer, 25/64" I.D. flat .....	1	1	1	2
26	2.8811	274694	Ring, retaining .....	1	1	1	2
26	2.8811	5127758	Shaft Assy., control link operating (front blower) .....				1
26	2.8811	2185521	Seal, control link operating shaft .....				2
26	2.8811	5127647	Bearing, control link operating shaft .....				2
26	2.8815	5112096	Gear, governor drive .....	1	1	1	1
26	2.8820	5126095	Shaft, governor drive .....	1	1	1	1
26	2.8830	954498	Bearing, governor drive thrust .....	1	1	1	1
-	-	5110604	Tube Assy., governor operating pressure (with output shaft governor).....	1	1	1	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	190367	Elbow, 1/4" - 90° street .....	1	1	1	
-	-	188754	Elbow, 5/16" inv. fl. tube 90° .....	1	1	1	
-	-	189060	Bushing, 3/4" x 1/4" red. pipe .....	1	1	1	
-	-	5574785	Reservoir Assy., governor oil (no element) (includes next 3 indented items) .....				1
-	-	5157992	Elbow, restricted (in reservoir) .....				1
-	-	5574161	Gasket, fuel filter cover .....				1
-	-	1503536	Gasket, fuel filter cover nut .....				1
-	-	103647	Draincock, 1/4" .....				1
-	-	143343	Elbow, 5/16" inv. fl. tube 90° .....				3
-	-	187343	Connector, 5/16" inv. fl. tube (in valve) .....				1
-	-	137406	Connector, 5/16" inv. fl. tube (in governor) .....				2
-	-	173203	Tee, 5/16" inv. fl. tube (right angle) .....				1
-	-	5100165	Valve, governor operating solenoid .....				1
26	2.8950	5124333	Cover, cylinder head to governor control link .....	2	2	2	4
26	2.8950	5124355	Hose, 1" I.D. x 13/16" L. ....	2	2	2	4
26	2.8950	5123812	Gasket, cylinder head to governor control link cover .....	2	2	2	4
26	2.8950	111612	Clamp, 1 3/8" dia. hose .....	2	2	2	4
26	2.8950	186630	Bolt, 1/4" - 20 x 5/8" hex. hd. ....	4	4	4	8
-	-	120392	Washer, 1/4" flat .....	4	4	4	8
26	2.8950	103319	Lockwasher, 1/4" .....	4	4	4	8
26	2.8965	5127422	Lever, governor control link shaft .....	1	1	1	
26	2.8965	5127379	Lever, governor control link shaft .....				1
-	-	5127380	Cap, governor control link shaft lever .....				1
26	2.8965	179796	Bolt, 1/4" - 20 x 3/4" hex. hd. ....	1	1	1	1
-	-	186625	Bolt, 5/16" - 18 x 7/8" hex. hd. ....	2	2	2	2
26	2.8965	103319	Lockwasher, 1/4" .....	1	1	1	1
-	-	103320	Lockwasher, 5/16" .....	2	2	2	2
26	2.8970	5127420	Link, governor operating lever to bell crank .....	1	1	1	1
26	2.8970	5127470	Bearing, governor operating link rod end .....	1	1	1	1
26	2.8970	5120472	Bearing, governor operating link rod end .....	1	1	1	1

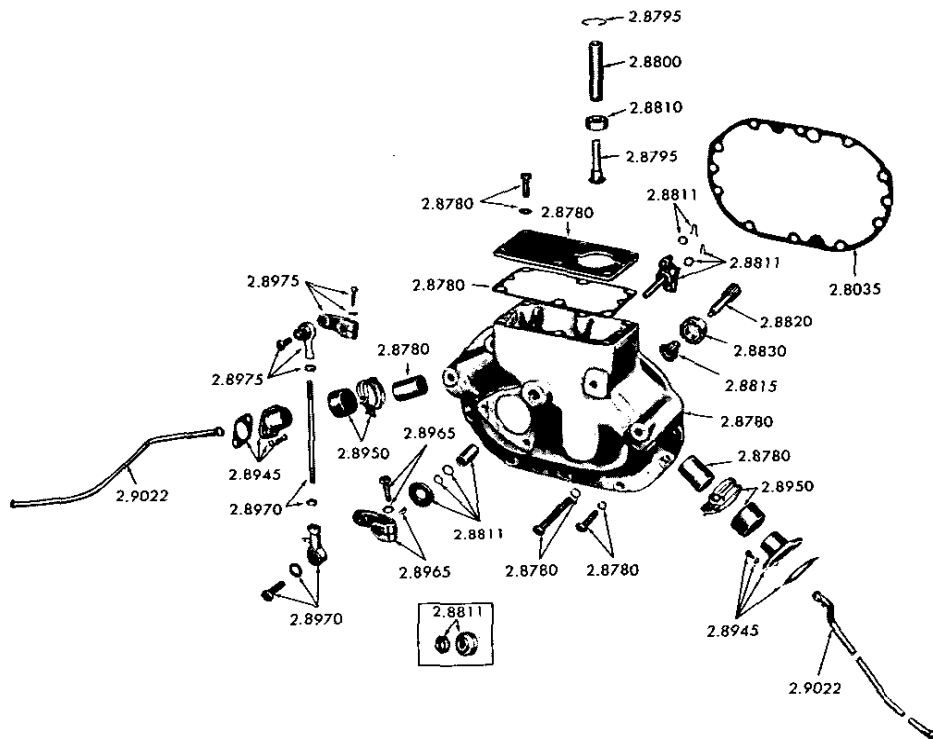


Fig. 26 - Hydraulic Governor Drive



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
26	2.8970	186625	Bolt, 5/16" - 18 x 7/8" hex. hd. ....	1	1	1	1
26	2.8970	103320	Lockwasher, 5/16" ....	1	1	1	1
26	2.8970	122193	Nut, 5/16" - 24 hex. (jam) ....	1	1	1	1
26	2.8975	5127419	Lever, governor operating shaft ....	1	1	1	1
26	2.8975	179796	Bolt, 1/4" - 20 x 3/4" hex. ....	1	1	1	1
26	2.8975	103319	Lockwasher, 1/4" ....	1	1	1	1
-	-	5119730	Filter Assy., oil (includes element and gasket) ....	1	1	1	
-	-	181595	Bolt, 5/16" - 24 x 3/4" hex. hd. ....	4	4	4	
-	-	120393	Washer, 5/16" flat ....	4	4	4	
-	-	103320	Lockwasher, 5/16" ....	4	4	4	
-	-	121917	Nut, 5/16" - 24 hex. ....	4	4	4	
-	-	9023813	Element, oil filter ....	1	1	1	
-	-	2374427	Gasket, oil filter element ....	1	1	1	
-	-	5128671	Bracket, oil filter mounting ....	1	1	1	
-	-	186622	Bolt, 3/8" - 16 x 1 1/4" hex. hd. ....	3	3	3	
-	-	103321	Lockwasher, 3/8" ....	3	3	3	
<b>INJECTOR CONTROLS</b>							
27	2.9001	5196566	Tube Assy., injector control (left bank) .....	1			
27	2.9001	5196565	Tube Assy., injector control (right bank) .....	1			
27	2.9001	5196568	Tube Assy., injector control (left bank) .....		1		
27	2.9001	5196567	Tube Assy., injector control (right bank) .....		1		
27	2.9001	5196570	Tube Assy., injector control (left bank) .....			1	
27	2.9001	5196569	Tube Assy., injector control (right bank) .....			1	
27	2.9001	5196568	Tube Assy., injector control (right bank front, left bank rear) .....				2
27	2.9001	5196567	Tube Assy., injector control (left bank front, right bank rear) .....				2
27	2.9003	5120687	Bracket, injector control tube .....	2	2	2	4
27	2.9003	5120687	Bracket, injector control tube .....	2	2	2	4
27	2.9003	186630	Bolt, 1/4" - 20 x 5/8" hex. hd. ....	8	8	8	16

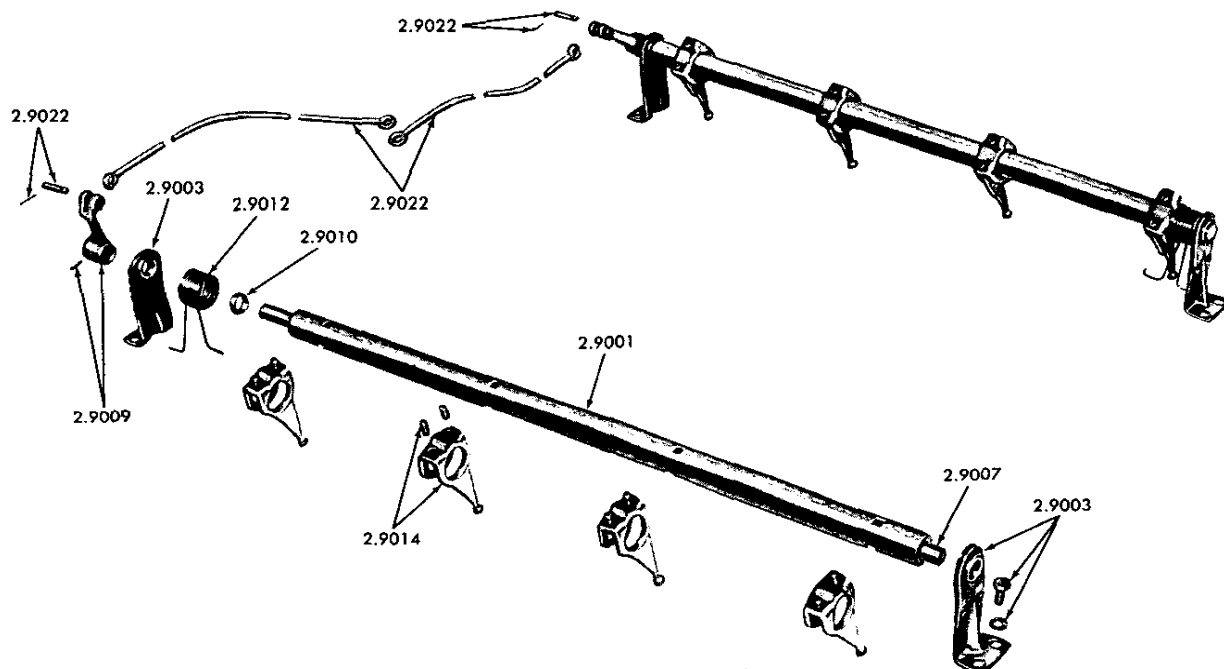


Fig. 27 - Injector Control Tube



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
27	2.9003	103319	Lockwasher, 1/4" .....	8	8	8	16
27	2.9007	5150259	Pin, injector control tube end .....	2	2	2	4
27	2.9009	5150263	Lever, injector control tube .....	2	2	2	4
27	2.9009	142486	Pin, 1/8" x 3/4" groove .....	2	2	2	4
27	2.9010	5150843	Spacer, injector control tube .....	2	2	2	4
27	2.9012	5124142	Spring, injector control tube .....	2	2	2	4
27	2.9014	5115321	Lever Assy., injector control tube (includes screws) .....	6	8	12	16
27	2.9014	5176228	Screw, injector control tube lever .....	12	16	24	32
27	2.9022	5117942	Link, injector control tube to governor (right bank, mechanical governor) .....	1	1	1	
27	2.9022	5117191	Link, injector control tube to governor (left bank, mechanical governor) .....	1	1	1	
-	-	5126102	Link, injector control tube to governor (right bank, hydraulic governor - open linkage) .....	1	1	1	
-	-	5126101	Link, injector control tube to governor (left bank, hydraulic governor - open linkage) .....	1	1	1	
-	-	5127415	Link, injector control tube to governor (right bank) (hydraulic governor - enclosed linkage) .....	1	1	1	
-	-	5127417	Link, injector control tube to governor (left bank) (hydraulic governor - enclosed linkage) .....	1	1	1	
-	-	5127415	Link, injector control tube to governor (long) (rear bank) (hydraulic governor) .....				1
-	-	5127417	Link, injector control tube to governor (short) (rear bank) (hydraulic governor) .....				1
-	-	5127416	Link injector control tube to governor (long) (front bank) (hydraulic governor) .....				1
-	-	5127418	Link, injector control tube to governor (short) (front bank) (hydraulic governor) .....				1
-	-	5150941	Washer, 5/16" flat (injector control tube to governor link) .....	4	4	4	8
27	2.9022	5150265	Pin, injector control tube link .....	2	2	2	4
27	2.9022	103361	Pin, 1/16" x 1/2" cotter .....	4	4	4	8
-	-	142583	Retainer, 13/64" spring .....	2	2	2	4
<b>THROTTLE CONTROLS (Hydraulic Governor)</b>							
-	-	5128820	Knob, throttle control (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	5128816	Lever, throttle control knob (8.70" L.) (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	5128817	Lever, throttle control knob (5.86" L.) (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	5113377	Disc, throttle control tube brake (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	5113378	Rod, throttle control knob tube brake (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	5128924	Shaft, throttle control knob (with side mounted instrument panel, radiator units) .....	1	1	1	
-	-	3292337	Control Assy., vernier throttle (control cabinet units) (includes indented items) .....	1	1	1	1
-	-	5129008	Control Assy., vernier throttle (side mounted panel, radiator units) (includes indented items) .....	1	1	1	
28	2.9135	3224408	Knob, vernier throttle control .....	1	1	1	1
28	2.9138	3291979	Spring, vernier throttle control lock .....	1	1	1	1
28	2.9138	112871	Screw, #6-32 x 5/16" rd. hd. sl. ....	2	2	2	2
28	2.9139	3224425	Worm, vernier throttle control .....	1	1	1	1
28	2.9140	3224405	Shaft, vernier throttle control, 5 7/16" L. (control cabinet units) .....	1	1	1	1
-	-	5183053	Shaft, vernier throttle control 3 7/16" L. (side mounted panel, radiator units) .....	1	1	1	
28	2.9141	3224410	Gear, vernier throttle control worm .....	1	1	1	1
-	-	106958	Key, 1/16" x 1/2" woodruff .....	1	1	1	1
28	2.9142	3224409	Bushing, vernier throttle control worm .....	1	1	1	1
28	2.9142	106498	Lockwasher, #12 .....	1	1	1	1



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
28	2.9142	103089	Nut, #12-24 hex. ....	1	1	1	1
28	2.9145	3224407	Button, vernier throttle control lock ....	1	1	1	1
28	2.9146	3224406	Pin, vernier throttle control lock button ....	1	1	1	1
28	2.9147	3224413	Spring, vernier throttle control lock button ....	1	1	1	1
28	2.9149	3292336	Cover, vernier throttle control ....	1	1		1
-	-	3292274	Plate, throttle control indicator ....				1

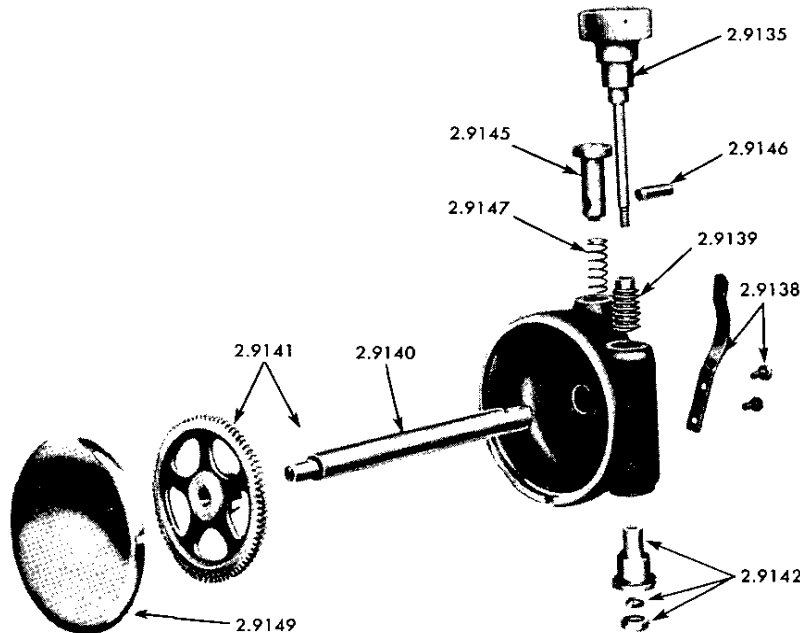


Fig. 28 - Vernier Throttle Control

29	2.9170	5126095	Plate, throttle control indicator (with control cabinet units) .....	1	1	1	1
-	-	133046	Bolt, 1/4" - 20 x 7/8" rd. hd. sl. ....	3	3	3	
-	-	103319	Lockwasher, 1/4" ....	3	3	3	
-	-	3292280	Bracket Assy., throttle control knob shaft (control cabinet units) ..		1	1	1
-	-	5100015	Bracket, throttle control knob shaft (side mounted instrument panel, radiator units) ....	1	1	1	
-	-	5184220	Bearing, rod end (with 5128656) ....	1	1	1	
-	-	455971	Bolt, 5/16" - 18 x 5 1/2" hex. hd. ....	2	2	2	
-	-	5126998	Shaft, control cabinet to engine throttle control ....		1	1	
-	-	5177462	Coupling, throttle control shaft (side mounted instrument panel, radiator units) ....	1	1	1	
-	-	5166494	Coupling, throttle control shaft (control cabinet units) ....		1	1	
-	-	142488	Pin, 1/8" x 1" taper ....	1	1	1	
-	-	139004	Screw, 1/4" - 28 x 1/4" set ....		4	4	
-	-	5125894	Bracket, governor control shaft (with tailshaft governor) ....		1	1	
-	-	5129410	Bracket Assy., governor control shaft (with control cabinet) .....		1	1	
-	-	5127320	Bracket Assy., governor control shaft (with control cabinet) (includes bushing) ....		1	1	
-	-	5127315	Bracket Assy., governor control shaft (with control cabinet) .....		1	1	
-	-	5127742	Bracket Assy., governor control shaft (rear) ....		1	1	
-	-	5127309	Bracket Assy., governor control shaft (front) ....		1	1	
-	-	5157412	Spacer, 3/8" I.D. x 1/4" W. (throttle control bracket) ....		1	1	
-	-	148403	Bearing, needle ....		2	2	
-	-	103343	Washer, 1/2" flat ....		2	2	
-	-	191758	Fitting, 1/8" lubrication ....		1	1	
-	-	179796	Bolt, 1/4" - 20 x 7/8" hex. hd. ....		2	2	
-	-	100001	Bolt, 1/4" - 28 x 3/4" hex. hd. ....		2	2	
-	-	214269	Bolt, 1/4" - 28 x 1" hex. hd. ....		2	2	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	119092	Bolt, 3/8"-24 x 4 3/4" hex. hd. ....		2	2	
-	-	103319	Lockwasher, 1/4".....		2	2	
-	-	122161	Nut, 1/4"-28 hex. ....		2	2	
-	-	186315	Bolt, 3/8"-24 x 4 1/2" hex. hd. ....		1	1	
-	-	186317	Bolt, 3/8"-24 x 5" hex. hd. ....		1	1	
-	-	455971	Bolt, 5/16"-18 x 5 1/2" hex. hd. ....		2	2	
-	-	5127090	Rod, throttle control (15 1/4"L.) (with control cabinet units).....		1	1	
-	-	5127236	Rod, throttle control (12 9/16"L.) (with control units).....		1	1	
-	-	5125890	Rod and Clevis Assy., throttle control (dev. L. 17.8") (with tail- shaft governor) .....		1		
-	-	5125892	Rod and Clevis Assy., throttle control (dev. L. 25.4") (with tail- shaft governor) .....		1		
-	-	5125891	Rod and Clevis Assy., throttle control (dev. L. 21") (with tail- shaft governor) .....		1	1	
-	-	109408	Joint, 5/16"-24 ball.....		2	2	
-	-	103045	Pin, 5/16" clevis .....		1	1	
-	-	103372	Pin, 3/32" x 1/2" cotter .....		1	1	
-	-	103319	Lockwasher, 1/4".....		2	2	
-	-	121902	Nut, 1/4"-28 hex. ....		4	4	
-	-	3222759	Lever, throttle control rod - lower (with control cabinet units)...		2	2	
-	-	106276	Bolt, 1/4"-28 x 1 1/8" hex. hd. (lever clamping).....		2	2	
-	-	103319	Lockwasher, 1/4".....		2	2	
-	-	122161	Nut, 1/4"-28 hex. ....		2	2	
-	-	5157412	Spacer, 3/8" I.D. x 1/4" W. (throttle control rod lever).....		1	1	
-	-	3222759	Lever, throttle control rod - front (with control cabinet units)....		1	1	
-	-	3222760	Lever, throttle control rod - rear (with control cabinet units) ....		1	1	
-	-	106276	Bolt, 1/4"-28 x 1 1/8" hex. hd. (lever clamping) .....		2	2	
-	-	103319	Lockwasher, 1/4".....		2	2	
-	-	122161	Nut, 1/4"-28 hex. ....		2	2	
-	-	5127808	Shaft and Lever Assy., throttle control cross (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	5127607	Tube, throttle control (cross shaft) (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	5113358	Spring, throttle control (cross shaft tube) (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	5113397	Bushing, throttle control (cross shaft tube) (with side mounted instrument panel, heat exchanger units) .....	2	2	2	
-	-	5113359	Spacer, throttle control (cross shaft tube) (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	122295	Nut, 1/2"-20 hex. thin (jam) .....		2	2	
-	-	5180116	Clamp, throttle control cross shaft tube (with side mounted instrument panel, heat exchanger units) .....	2	2	2	
-	-	103319	Lockwasher, 1/4".....	4	4	4	
-	-	123179	Nut, 1/4"-20 hex. ....	4	4	4	
-	-	5128161	Shaft, throttle control (engine end) (dev. L. 28.1") (with control cabinet units) .....		1		
-	-	5128160	Shaft, throttle control (engine end) (dev. L. 39.6") (with control cabinet units) .....			1	
-	-	5128163	Shaft, throttle control (generator end) (dev. L. 37") (with control cabinet units) .....		1		
-	-	5128164	Shaft, throttle control (generator end) (dev. L. 45") (with control cabinet units) .....			1	
-	-	5125887	Shaft, throttle control (dev. L. 28 7/8") (with tailshaft governor).		1		
-	-	5125888	Shaft, throttle control (dev. L. 40 9/32") (with tailshaft governor)			1	
-	-	5128232	Shaft, throttle control (dev. L. 9 1/4") (with side mounted instrument panel, heat exchanger units) .....	1	1		
-	-	5128231	Shaft, throttle control (dev. L. 13 3/4") (with side mounted instrument panel, heat exchanger units) .....			1	
-	-	5163906	Spacer, throttle control shaft (7/16" I.D. x 1/4" W.) .....		2	2	
-	-	5150238	Washer, throttle control shaft (7/16" I.D. x 1/16" W.) .....		1	1	
-	-	5118951	Joint, 5/16"-24 ball (with shield) .....		2	2	
-	-	109408	Joint, 5/16"-24 ball .....		2	2	
-	-	103320	Lockwasher, 5/16" .....		2	2	
-	-	121917	Nut, 5/16"-24 hex. ....		4	4	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	122193	Nut, 1/16"-24 hex. (jam) .....		4	4	
-	-	3222760	Lever, governor control shaft (with control cabinet unit) .....		1	1	1
-	-	106276	Bolt, 1/4"-28 x 1 1/8" hex. hd. (lever clamping) .....		1	1	1
-	-	103319	Lockwasher, 1/4" .....		1	1	1
-	-	121902	Nut, 1/4"-28 hex. ....		1	1	1
-	-	5121239	Rod, governor control shaft (linkage to governor lever ) (dev. L. 7-1/2") (with control cabinet units) .....		1	1	
-	-	5129029	Rod, governor control shaft (linkage to governor lever) (dev. L. 2.38") (with side mounted instrument panel, heat exchanger units) .....	1	1	1	
-	-	109407	Joint, 1/4"-28 ball .....		2	2	
-	-	5118491	Joint, 1/4"-28 ball (with shield) .....	2	2	2	
-	-	103319	Lockwasher, 1/4" .....	2	2	2	
-	-	121902	Nut, 1/4"-28 hex. ....	4	4	4	
-	-	5128848	Spring, governor control retracting (with control cabinet units) ..		1	1	
-	-	3249132	Lever, governor control (with control cabinet units) (with side mounted instrument panel, radiator units) .....	1	1	1	
-	-	5113338	Lever, governor control with tailshaft .....		1	1	
-	-	5175081	Lever, governor control (with tailshaft governor) .....		1	1	
-	-	5110134	Lever, governor control (1 3/8" L.) .....				1
-	-	5124504	Lever, governor control (2 1/4" L.) .....				1
-	-	5182684	Quadrant, governor throttle control (with tailshaft governor) .....		1	1	
-	-	5182699	Stud, 5/16"-24 x 2 7/16" (with tailshaft governor) .....		1	1	
-	-	5182685	Nut, throttle locking (with tailshaft governor) .....		1	1	
-	-	5170765	Spacer, 3/8" I.D. x 5/16" W. ....		1	1	
-	-	186647	Bolt, 1/4"-20 x 1" hex. hd. ....		1	1	1
-	-	123179	Nut, 1/4"-20 hex. ....		1	1	
-	-	131485	Nut, 5/16"-24 hex. (low crown) .....		1	1	
-	-	179796	Bolt, 1/4"-20 x 7/8" hex. hd. (lever clamping) .....		1	1	
-	-	106276	Bolt, 1/4"-28 x 1 1/8" hex. hd. (lever clamping) .....	1	1	1	1
-	-	103319	Lockwasher, 1/4" .....	1	1	1	2
-	-	1990953	Wire Assy., 48" L. governor control (with tailshaft governor) ....		1	1	
-	-	5184255	Name Plate, governor control wire .....		1	1	
-	-	103341	Washer, 3/8" flat .....		1	1	
-	-	103321	Lockwasher, 3/8" .....		1	1	
-	-	117049	Nut, 3/8"-24 hex. ....		1	1	
-	-	5161484	Pin, governor control wire swivel .....		1	1	
-	-	5150941	Washer, governor control wire swivel .....		1	1	
-	-	142583	Retainer, 13/64" spring .....		1	1	
-	-	100659	Screw, #10-32 x 3/8" fil. hd. ....		1	1	
-	-	5163442	Clip, governor control wire tube .....		1	1	
-	-	5176267	Lock, throttle control lever (with tailshaft governor) .....		1	1	
<b>THROTTLE CONTROLS (Mechanical Governor)</b>							
29	2.9100	5174103	Knob, throttle control (rotary throttle adjustment) .....	1	1	1	
-	-	5128820	Knob, throttle control (vertical lever throttle adjustment) .....	1	1	1	
-	-	5128816	Lever, throttle control knob (9 3/8" L.) .....	1	1	1	
-	-	5128817	Lever, throttle control knob (6 1/2" L.) .....	1	1	1	
-	-	100002	Bolt, 1/4"-28 x 1" hex. hd. ....	1	1	1	
-	-	103319	Lockwasher, 1/4" .....	1	1	1	
-	-	5113377	Disc, throttle control tube brake .....	1	1	1	
-	-	5113378	Pad, throttle control tube brake .....	1	1	1	
-	-	3222756	Washer, throttle control tube brake .....	1	1	1	
-	-	5182842	Shaft, throttle control knob .....	1	1	1	
-	-	443136	Pin, 1/8" x 1 1/4" groove .....	1	1	1	
-	-	5174105	Spring, throttle control shaft tension .....	1	1	1	
-	-	5187628	Washer, 5/8" flat .....	1	1	1	
-	-	3222765	Bushing, throttle knob shaft .....	2	2	2	
-	-	5182816	Adaptor Assy., throttle control knob (includes bushings) .....	1	1	1	
29	2.9170	5124455	Plate, throttle control indicator .....	1	1	1	
-	-	5177462	Coupling, throttle control shaft .....	1	1	1	
-	-	142488	Pin, 1/8" x 1" groove .....	1	1	1	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	139011	Screw, 1/4"-28 x 3/8" set .....	1	1	1	
29	2.9220	5124468	Bracket, governor control shaft - rear .....	1	1	1	
-	-	132273	Screw, 1/4"-20 x 1" fil. hd. sl. ....	2	2	2	
29	2.9230	5184220	Bearing, governor control shaft bracket .....	1	1	1	
-	-	122264	Nut, 7/16"-20 hex. ....	2	2	2	
29	2.9280	5124487	Shaft, throttle control (to knob shaft) .....	1	1		
29	2.9280	5124488	Shaft, throttle control (to knob shaft) .....			1	
29	2.9300	5124371	Lever, governor control .....	1	1	1	
29	2.9300	5171125	Lever, governor control .....		1	1	
-	-	179796	Bolt, 1/4"-20 x 7/8" hex. hd. ....	1	1	1	
-	-	5127611	Shaft and Lever Assy., throttle control cross (variable speed governor) .....	1	1	1	
-	-	5127608	Shaft and Lever Assy., throttle control cross (limiting speed governor) .....	1	1	1	
-	-	5127607	Tube, throttle control (cross shaft) .....	1	1	1	
-	-	5113358	Spring, throttle control (cross shaft tube) .....	1	1	1	
-	-	5113397	Bushing, throttle control (cross shaft tube) .....	2	2	2	
-	-	5113359	Spacer, throttle control (cross shaft tube) .....	1	1	1	
-	-	122295	Nut, 1/2"-20 hex. thin (jam) .....	2	2	2	
-	-	5180116	Clamp, throttle control cross shaft tube .....	2	2	2	
-	-	103319	Lockwasher, 1/4" .....	4	4	4	
-	-	123179	Nut, 1/4"-20 hex. ....	4	4	4	
29	2.9344	5122351	Bracket, throttle booster spring (variable speed governor) .....	1	1	1	
-	-	179839	Bolt, 3/8"-16 x 1" hex. hd. ....	2	2	2	
-	-	186612	Bolt, 3/8"-16 x 1 3/8" hex. hd. ....	2	2	2	
-	-	103321	Lockwasher, 3/8" .....	2	2	2	
-	-	5118896	Spacer, throttle booster spring bracket (variable speed governor) .....	1	1	1	
29	2.9347	5127516	Spring, throttle booster (variable speed governor) .....	1	1	1	

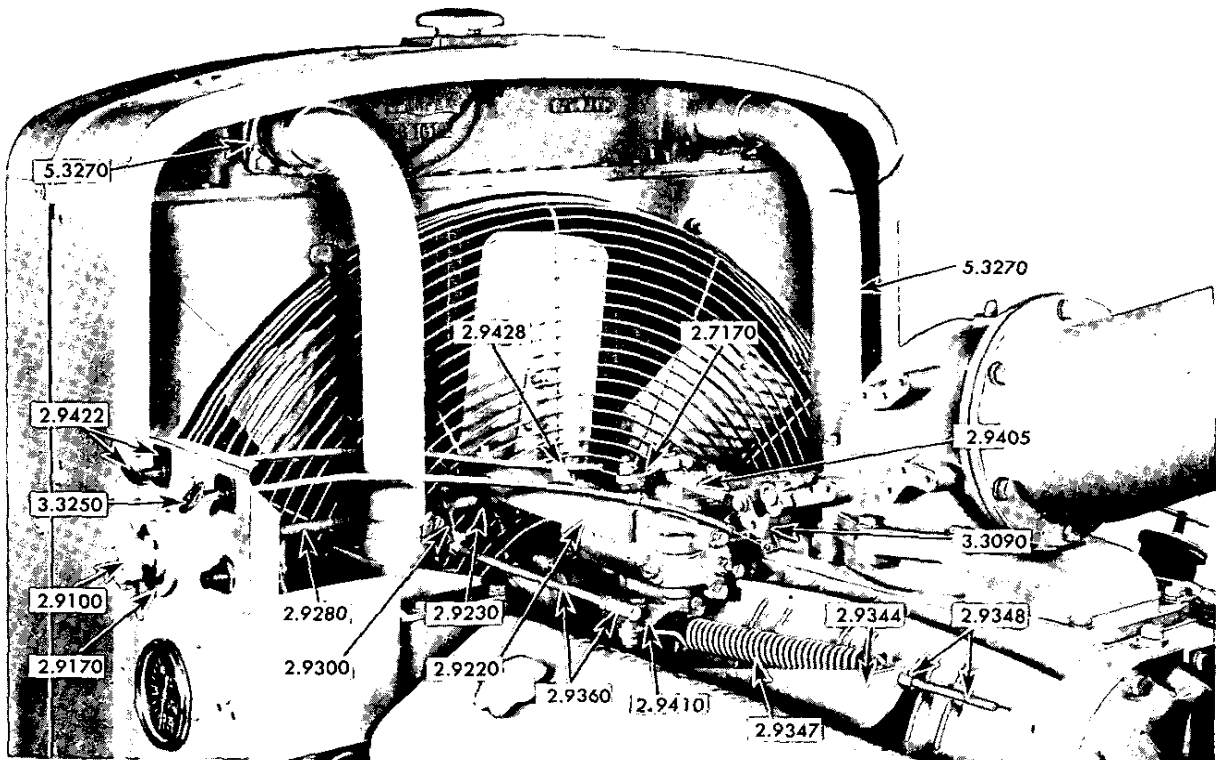


Fig. 29 - Throttle Controls



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
29	2.9348	5173036	Eye, throttle booster adjusting (variable speed governor) .....	1	1	1	
29	2.9348	123179	Nut, 1/4"-20 hex. ....	2	2	2	
-	-	5186749	Nut, throttle booster support (spring hanger) (variable speed governor) .....	1	1	1	
29	2.9360	5127598	Shaft, throttle control (variable speed governor) .....	1	1		
29	2.9360	5124427	Shaft, throttle control (variable speed governor) .....			1	
29	2.9360	5128232	Shaft, throttle control (limiting speed governor) .....	1	1		
29	2.9360	5128231	Shaft, throttle control (limiting speed governor) .....			1	
-	-	5171045	Bolt, throttle booster support (variable speed governor) .....	2	2	2	
29	2.9405	5173105	Spring, governor lever retracting (variable speed governor) ....	1	1	1	
29	2.9405	5173106	Clip, retracting spring (variable speed governor) .....	1	1	1	
29	2.9410	5122350	Lever, governor control (with air cleaner) (variable speed governor)	1	1	1	
29	2.9410	5123880	Lever, governor control (with air silencer)(variable speed governor)	1	1	1	
29	2.9410	5129917	Lever, governor control (variable speed governor) .....	1	1	1	
-	-	179796	Bolt, 1/4"-20x7/8" hex. hd. ....	1	1	1	
-	-	103319	Lockwasher, 1/4" .....	1	1	1	
29	2.9422	1990953	Wire Assy., governor control (48" L.) .....	1	1	1	
29	2.9422	5184255	Name Plate, governor control .....	1	1	1	
-	-	103341	Washer, 3/8" flat .....	1	1	1	
-	-	103321	Lockwasher, 3/8" .....	1	1	1	
-	-	117049	Nut, 3/8"-24 hex. ....	1	1	1	
-	-	5161464	Pin, governor control wire swivel .....	1	1	1	
-	-	5150941	Washer, governor control wire swivel .....	1	1	1	
-	-	142583	Retainer, 13/64" spring .....	1	1	1	
-	-	100659	Screw, #10-32x3/8" fil. hd. ....	1	1	1	
29	2.9428	5127619	Clip, governor control wire tube .....	1	1	1	
<b>AIR CLEANER</b>							
62	3.1001	5123925	Air Cleaner Assy. (12" dia.) (oil bath) (cup 4 1/4" deep) (4 1/2" outlet)		2		
33,52	3.1001	5114221	Air Cleaner Assy. (14" dia.) (oil bath) (cup 4" deep)	1	1	2	
62	3.1001	5127363	Air Cleaner Assy. (14" dia.) (oil bath) (cup 4 3/4" deep)	1		2	
33	3.1001	5129862	Air Cleaner Assy. (14" dia., heavy duty) (oil bath) (cup 5 7/32" deep)	1			
-	-	5129866	Air Cleaner Assy. (16" dia.) (oil bath) .....				2
-	-	5127179	Air Cleaner Assy. (dry type) .....	1			
-	-	5127170	Air Cleaner Assy. (dry type) .....		1		
-	-	5127150	Air Cleaner Assy. (dry type) .....			1	
-	-	5127881	Aspirator, exhaust (with dry type cleaner) .....	2			
-	-	5127171	Aspirator, exhaust (with dry type cleaner) .....		2		
-	-	5127151	Aspirator, exhaust (with dry type cleaner) .....			2	
-	-	5127281	Elbow (1 1/2" dia.) (with dry type cleaner) .....	2			
-	-	5127168	Elbow (2" dia.) (with dry type cleaner) .....		2	2	
-	-	5127174	Hose Assy. (1 1/2" dia. x 9' L. flex.) (with dry type cleaner) ....	2			
-	-	5127167	Hose Assy. (2" dia. x 9' L. flex.) (with dry type cleaner) .....		2	2	
-	-	5127283	Clamp (1 5/8" dia. hose) (with dry type cleaner) .....	4			
-	-	5127284	Clamp (2 1/4" dia. hose) (with dry type cleaner) .....		4	4	
-	-	5124115	Gage, air cleaner (with dry type cleaner) .....	1	1	1	
30	3.1010	5196944	Cup, air cleaner oil (12" dia., outer) .....		2		
30	3.1010	5196943	Cup, air cleaner oil (12" dia., inner) .....		2		
30,33	3.1010	5195331	Cup, air cleaner oil (14" dia., oil bath) (4" deep) .....	1	1	2	
30	3.1010	5196952	Cup, air cleaner oil (14" dia., outer) .....	1		2	
30	3.1010	5196951	Cup, air cleaner oil (14" dia., inner) .....	1		2	
30	3.1050	5196942	Element, air cleaner (12" dia., oil bath) .....		2		
30	3.1050	5195330	Element, air cleaner (14" dia., oil bath) (4" oil cup) .....	1	1	2	
30	3.1050	5196950	Element, air cleaner (14" dia., oil bath) .....	1		2	
30	3.1070	5196948	Band, air cleaner side (14" dia. cleaner) .....	2	2	4	
30	3.1070	5196953	Band, air cleaner side (14" dia. cleaner) .....	2		4	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
33,52	3.1070	5195327	Clamp Assy., oil cup retaining (14" dia., oil bath) .....	1	1	2	
30	3.1070	5196945	Rod Assy., air cleaner side (14" dia., oil bath) .....	2	4	4	
30	3.1070	5196948	Rod Assy., air cleaner side (12" dia., oil bath) .....		4		
30	3.1100	5110225	Hood, air cleaner air inlet (5" pipe dia.) (with oil bath air cleaner) .....	1		2	
30	3.1100	5110226	Hood, air cleaner air inlet (4 1/2" pipe dia.) (with oil bath air cleaner) .....		2		
-	-	5129934	Hood, air cleaner inlet (16" dia. cleaner) .....				2
-	-	5185801	Strap, air cleaner mounting (upper) (with 14" oil bath air cleaner) .....	1			
-	-	5184134	Strap, air cleaner mounting (lower) (with 14" oil bath air cleaner) .....	1			
33,52	3.1220	5185801	Strap, air cleaner mounting (with 14" oil bath air cleaner) .....	2	2	4	
-	-	5185800	Strap, air cleaner mounting (with 12" oil bath air cleaner) .....		4		
-	-	5129935	Strap, air cleaner mounting (16" dia. cleaner) .....				4
-	-	5126858	Pipe, air cleaner to air inlet housing (short) (with oil bath air cleaner) .....	1			
-	-	5123473	Pipe, air cleaner to air inlet housing (long) (with oil bath air cleaner) .....	1			

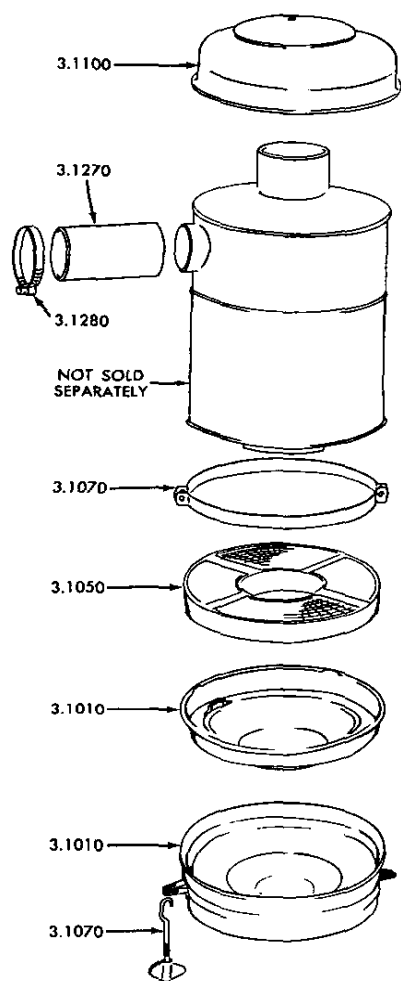


Fig. 30 - Air Cleaner

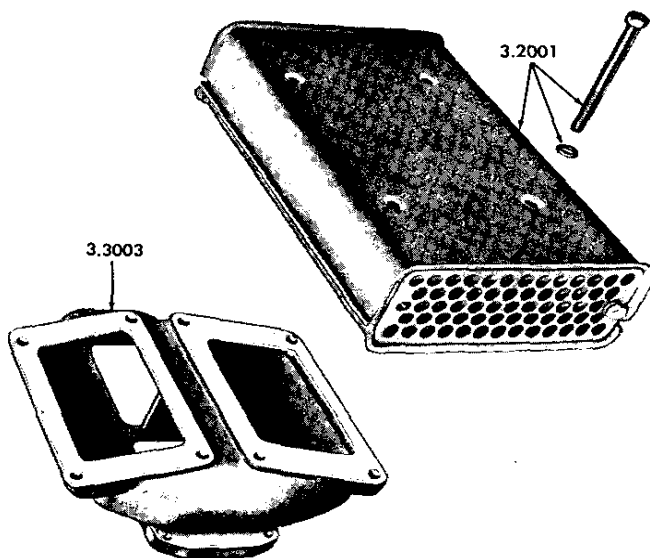


Fig. 31 - Air Silencer



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5125568	Pipe, air cleaner to air inlet housing (with dry type air cleaner)	1			
-	-	5125569	Pipe, air cleaner to air inlet housing (with dry type air cleaner)		1		
-	-	5125555	Pipe, air cleaner to air inlet housing (with dry type air cleaner)			1	
33	3.1260	5123474	Pipe, air cleaner to air inlet housing (with single oil bath air cleaner) .....		1		
33,52	3.1260	5125266	Pipe, air cleaner to air inlet housing (with dual oil bath air cleaner) .....		1		
33,52	3.1260	5125588	Pipe, air cleaner to air inlet housing (short) (with dual oil bath air cleaner) .....			1	
33,52	3.1260	5123046	Pipe, air cleaner to air inlet housing (long) (with dual oil bath air cleaner) .....			1	
-	-	5122310	Pipe, air cleaner to inlet housing (rear blower) .....				1
-	-	5122124	Pipe, air cleaner to inlet housing (front blower) .....				1
-	-	5123750	Gasket, air cleaner to air inlet housing pipe .....	1	1		2
-	-	5123933	Gasket, air cleaner to air inlet housing pipe .....			1	
33,52	3.1270	5187664	Hose, air inlet pipe (4" I.D. x 3") .....		2		
33,52	3.1270	5183904	Hose, air inlet pipe (4" I.D. x 4 1/2") .....		2		
33,52	3.1270	5116939	Hose, air inlet pipe (5 1/2" I.D. x 3 1/2") .....	1	1	2	2
33,52	3.1270	5125531	Hose, air inlet pipe (7" x 3") .....			2	
33,52	3.1280	5113246	Clamp, air inlet pipe hose (4 3/4" dia.) .....		8		
33,52	3.1280	5114937	Clamp, air inlet pipe hose (6" dia.) .....	2	2		8
33,52	3.1280	5114937	Clamp, air inlet pipe hose (6" dia.) .....	4		8	
-	-	5125532	Clamp, air inlet pipe hose (7" dia.) .....			2	
<b>AIR SILENCER</b>							
31	3.2001	5189848	Silencer Assy., air .....	2		4	
31	3.2001	5187177	Silencer Assy., air .....		2		4
31	3.2001	191249	Bolt, 3/8"-16 x 3 3/4" hex. hd. ....	8	8	16	16
31	3.2001	103341	Washer, 3/8" flat .....	8	8	16	16
-	-	103321	Lockwasher, 3/8" .....	8	8	16	16
-	-	179838	Bolt, 3/8"-16 x 7/8" hex. hd. ....	8	8	16	16
-	-	103341	Washer, 3/8" flat .....	8	8	16	
-	-	103321	Lockwasher, 3/8" .....	8	8	16	
-	-	1543776	Screen, air silencer .....	4	4	8	8
<b>AIR INLET HOUSING</b>							
-	-	5125327	Housing Assy., air inlet (vertical inlet) (air cleaner) .....	1	1		
32	3.3001	5123642	Housing Assy., air inlet (vertical inlet) (air cleaner) .....	1	1		2
32,76	3.3001	5123641	Housing Assy., air inlet (horizontal inlet ) (air cleaner) .....			1	
-	-	5128911	Housing Assy., air inlet (air silencer) .....	1		2	
-	-	5128912	Housing Assy., air inlet (air silencer) .....		1		2
32	3.3003	5123608	Housing, air inlet (horizontal inlet) (air cleaner) .....	1	1		2
32	3.3003	5122690	Housing, air inlet (horizontal inlet) (air cleaner) .....			1	
32	3.3003	5125295	Housing, air inlet (vertical inlet) (air cleaner) .....	1	1		
31	3.3003	5129082	Housing, air inlet (air silencer) .....	1		2	
31	3.3003	5129084	Housing, air inlet (air silencer) .....		1		2
32	3.3003	186630	Bolt, 1/4"-20 x 5/8" hex. hd. ....			1	
32	3.3003	186622	Bolt, 3/8"-16 x 1 1/4" hex. hd. ....	4	4	4	8
-	-	186619	Bolt, 3/8"-16 x 1 1/8" hex. hd. ....	4	4	4	8
32	3.3003	179849	Bolt, 3/8"-16 x 2 1/2" hex. hd. ....			2	
-	-	179851	Bolt, 3/8"-16 x 3" hex. hd. ....	2	2	2	4
32	3.3003	186283	Bolt, 3/8"-16 x 3 1/2" hex. hd. ....	2	2		4
32	3.3003	103341	Washer, 3/8" flat .....	2	2	4	4
32	3.3003	103321	Lockwasher, 3/8" .....	6	6	6	12
32	3.3004	5123609	Adaptor, air inlet housing (air cleaner) .....	1			
32	3.3004	5123610	Adaptor, air inlet housing (air cleaner) .....		1		2
32,33	3.3004	5117572	Adaptor, air inlet housing (air cleaner) .....			1	
32	3.3004	186619	Bolt, 3/8"-16 x 1 1/8" hex. hd. ....	6	6	8	12



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	186612	Bolt, 3/8"-16 x 1 3/8" hex. hd. ....			4	
32	3.3004	103341	Washer, 3/8" flat .....			4	
32	3.3004	103321	Lockwasher, 3/8" .....				
32	3.3010	5123703	Gasket, air inlet housing (air cleaner) .....	6	6	12	12
32	3.3010	5123692	Gasket, air inlet housing (air cleaner) .....	1	1		2
-	-	-	Plate, air inlet housing striker (air silencer) .....			1	
-	-	-	Plate, air inlet housing striker (air silencer) .....	1		2	
-	-	5128836	Valve Assy., air shutdown (air silencer) } (includes items	2	1	4	2
-	-	5128837	Valve Assy., air shutdown (air silencer) } marked @) .....				
-	-	5128842	@Hinge, air shutdown valve (air silencer) .....	2	2	4	4
-	-	5128046	@Spring, air shutdown valve tension (air silencer) .....	2	2	4	4
-	-	9416147	@Pin, air shutdown valve tension spring (air silencer) .....	2	2	4	4
32	3.3040	5123684	Valve, air inlet housing shutdown (air cleaner) .....	1	1		2
32	3.3040	5117315	Valve, air inlet housing shutdown (air cleaner) .....			1	
-	-	5128841	@Valve, air inlet housing shutdown (air silencer) .....	2		4	
-	-	5128840	@Valve, air inlet housing shutdown (air silencer) .....		2		4
32	3.3040	273436	Pin, 1/8" x 11/16" roll .....	2	2	2	4
32	3.3050	5122296	Shaft, air inlet housing shutdown valve (air cleaner) .....	1	1		2
32	3.3050	5117249	Shaft, air inlet housing shutdown valve (air cleaner) .....			1	
-	-	5128863	Shaft, air inlet housing shutdown valve (air silencer) .....	1		2	
-	-	5128862	Shaft, air inlet housing shutdown valve (air silencer) .....		1		2
32	3.3050	273436	Pin, 1/8" x 11/16" roll .....	1	1	1	2
32	3.3050	103341	Washer, 3/8" flat .....	1	1	1	2

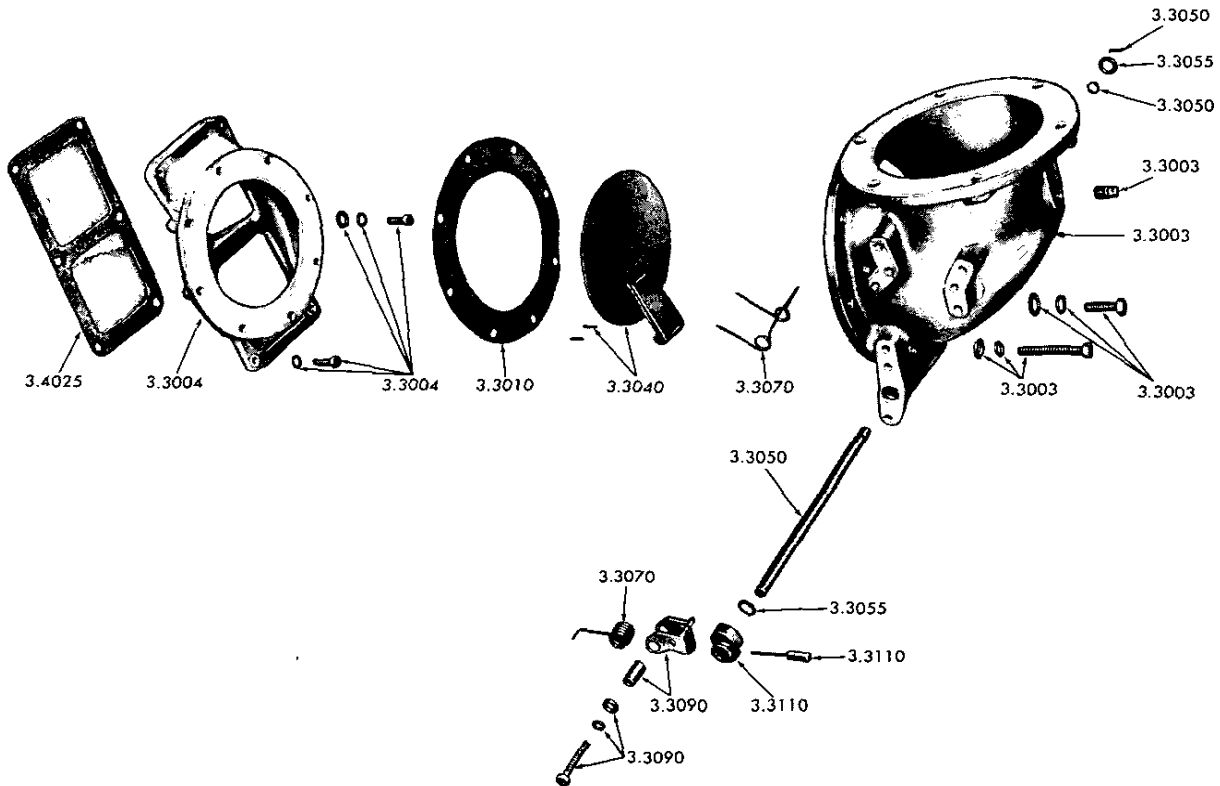


Fig. 32 - Air Inlet Housing



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
32	3.3055	5179232¢	Ring, air inlet housing shutdown valve shaft seal .....	2	2	2	4
32	3.3070	5111904¢	Spring, air inlet housing shutdown valve tension .....	1	1	1	2
32	3.3070	5123743	Spring, air inlet housing shutdown latch tension (air cleaner) .....	1	1	1	2
-	-	5124962	Spring, air inlet housing shutdown latch tension (air cleaner) .....	1	1	1	
-	-	5114124	Spring, air inlet housing shutdown latch tension (air silencer) .....	1	1	2	2
32	3.3090	5112785¢	Latch, air inlet housing shutdown valve .....	1	1	1	2
29	3.3090	5114727	Latch, air inlet housing shutdown valve (air cleaner) .....	1	1	1	
32	3.3090	5113633¢	Spacer, air inlet housing shutdown valve latch .....	1	1	1	2
32	3.3090	121926	Bolt, 1/4"-20 x 1 1/2" hex. hd. ....	1	1	1	2
32	3.3090	120392	Washer, 1/4" flat .....	1	1	1	2
32	3.3090	120380	Lockwasher, 1/4" .....	1	1	1	2
32	3.3110	5114974¢	Handle Assy., air inlet housing shutdown (includes pin) .....	1	1	1	2
-	-	455973¢	Pin, 1/8" x 1 3/4" .....	1	1	1	2
32	3.3110	5122623	Cam, air shutdown (air cleaner) .....	1	1	1	2
-	-	5122983	Cam, air shutdown (air silencer) .....	1	1	2	2
29	3.3250	1990892	Wire Assy., air inlet housing shutdown control (90" L.) .....	1	1	1	2
-	-	3290569	Clip, control wire .....	1	1	1	2
-	-	375437	Stop, control wire clip .....	1	1	1	2
-	-	140855	Screw, #8-32 x 5/16" set .....	1	1	1	2
-	-	123298	Bolt, 1/4"-28 x 3/8" hex. hd. ....	1	1	1	2
-	-	120393	Washer, 5/16" flat .....	1	1	1	2
-	-	103319	Lockwasher, 5/16" .....	1	1	1	2
-	-	121902	Nut, 1/4"-28 hex. ....	1	1	1	2
<b>BLOWER</b>							
-	-	5121733	Blower Assy. ....	1			
-	-	5121731	Blower Assy. ....		1		2
75	3.4001	5121728	Blower Assy. (rear) } (includes indented items) .....			1	
33,75	3.4001	5121729	Blower Assy. (front) } .....			1	
-	-	187491	Bolt, 3/8"-16 x 5 1/2" hex. hd. ....	4	6	8	12
-	-	9411488	Bolt, 7/16"-14 x 8 1/4" hex. hd. ....	2	2	4	4
-	-	5121814	Washer (3/4" W. x .40" I.D.) .....	4	6	8	12
-	-	5121905	Washer (5/32" W. x 15/32" I.D.) .....	2	2	4	4
-	-	5196384	Blower Kit, installation } (includes all parts required	AR			
-	-	5196385	Blower Kit, installation } for blower installation) .....		AR		AR
-	-	5196386	Blower Kit, installation } .....			AR	
-	-	5196383	Blower Kit, repair .....	AR	AR	AR	AR
34	3.4010	5123297	Gasket, blower .....	1		2	
34	3.4010	5123296	Gasket, blower .....		1		2
34	3.4020	5117419	Housing, blower .....	1		2	
34	3.4020	5117935	Housing, blower .....		1		2
32	3.4025	5117591	Screen, blower .....	1		2	
32	3.4025	5117590	Screen, blower .....		1		2
34	3.4030	5117067	Rotor Assy., blower (RH helix) .....	1		2	
34	3.4030	5117069	Rotor Assy., blower (RH helix) .....		1		2
34	3.4030	5117072	Rotor Assy., blower (LH helix) .....	1		2	
34	3.4030	5117073	Rotor Assy., blower (LH helix) .....		1		2
34	3.4040	7451054	Bearing, blower rotor (front) .....	2	2	4	4
34	3.4050	5179017	Retainer, blower rotor bearing .....	2	2	4	4
34	3.4050	443603	Bolt, 1/4"-20 x 3/4" hex. hd. ....	6	6	12	12
34	3.4050	103319	Lockwasher, 1/4" .....	6	6	12	12
34	3.4060	954418	Bearing, blower rotor (rear) .....	2	2	4	4
34	3.4070	5179017	Retainer, blower rotor rear bearing .....	2	2	4	4

¢ Quantity required on these items doubles when used with air silencer on 12V-71 models.



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
34	3.4070	443603	Bolt, 1/4"-20 x 3/4" hex. hd. ....	6	6	12	12
34	3.4070	103319	Lockwasher, 1/4" ....	6	6	12	12
34	3.4080	5196321	Gear Set, blower rotor ....	1	1	2	2
34	3.4080	5117081	Bolt ....	2	2	4	4
34	3.4080	5117082	Spacer, blower rotor gear ....	2	2	4	4
34	3.4090	5150372	Shim, blower rotor gear (.002") ....	AR	AR	AR	AR
34	3.4090	5153938	Shim, blower rotor gear (.003") ....	AR	AR	AR	AR
34	3.4090	5150855	Shim, blower rotor gear (.005") ....	AR	AR	AR	AR
34	3.4090	5150856	Shim, blower rotor gear (.010") ....	AR	AR	AR	AR
-	-	5117090	Sprocket, blower rotor gear drive (rear blower) ....			1	
-	-	5117082	Spacer, blower rotor gear drive sprocket ....			1	
-	-	5117081	Bolt ....			1	
-	-	5117092	Sprocket, blower rotor gear drive (front blower) ....			1	
-	-	5125464	Bolt, 3/8" - 24 x 1" hex. socket hd. (sprocket to gear) ....			3	
-	-	5117091	Chain, blower rotor gear sprocket coupling ....			1	
34	3.4110	5154401	Disc, blower rotor fuel pump coupling ....	1	1	1	2
34	3.4110	5154398	Lockwasher, 1/2" ....	1	1	1	2
34	3.4110	182776	Bolt, 1/2"-20 x 1 1/4" hex. hd. ....	1	1	1	2
34	3.4110	5117778	Spacer, blower rotor fuel pump coupling disc ....	1	1	1	2
12,35	3.4130	5122914	Hub, blower rotor gear ....	1	1	1	2
12,35	3.4135	5122915	Plate, blower rotor gear hub spring ....	2	2	2	2
12,35	3.4135	5122937	Bolt, 3/8"-24 x 15/16" hex. hd. ....	6	6	6	12
35	3.4135	103321	Lockwasher, 3/8" ....	6	6	6	12
34	3.4140	5117458	Plate Assy., blower housing end - front (includes pin and seal) ....	1	1	2	2
34	3.4140	5123468	Plate Assy., blower housing and plate - rear (includes pin and seal) ....	1	1	2	2

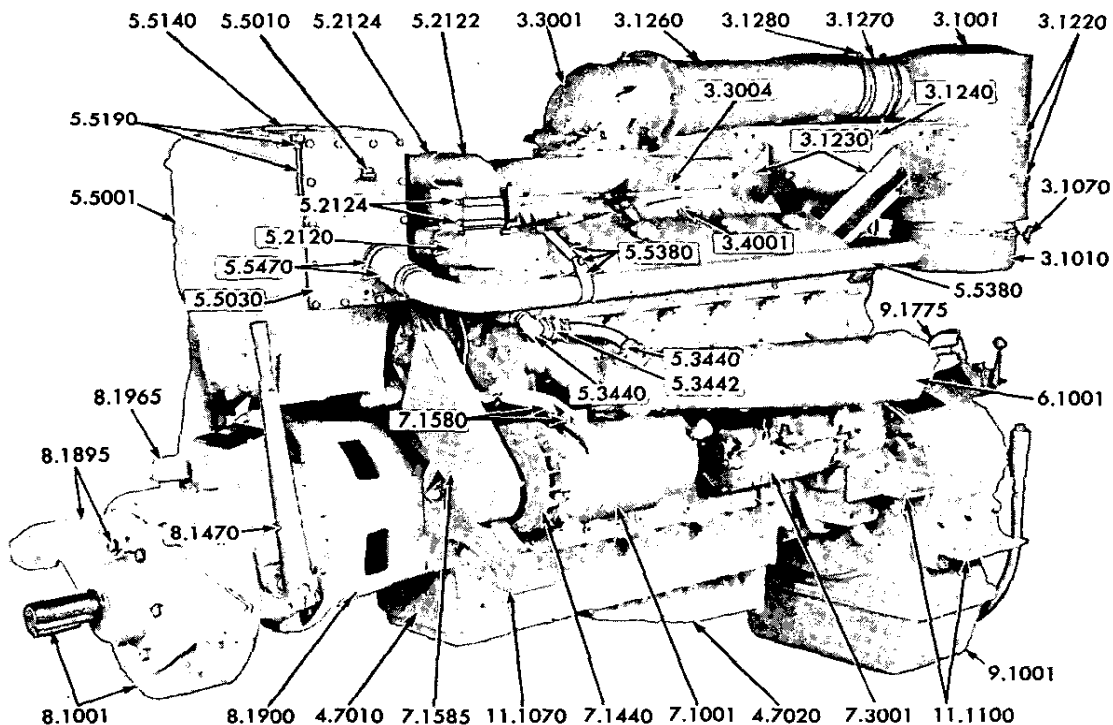


Fig. 33 - Typical Marine Engine



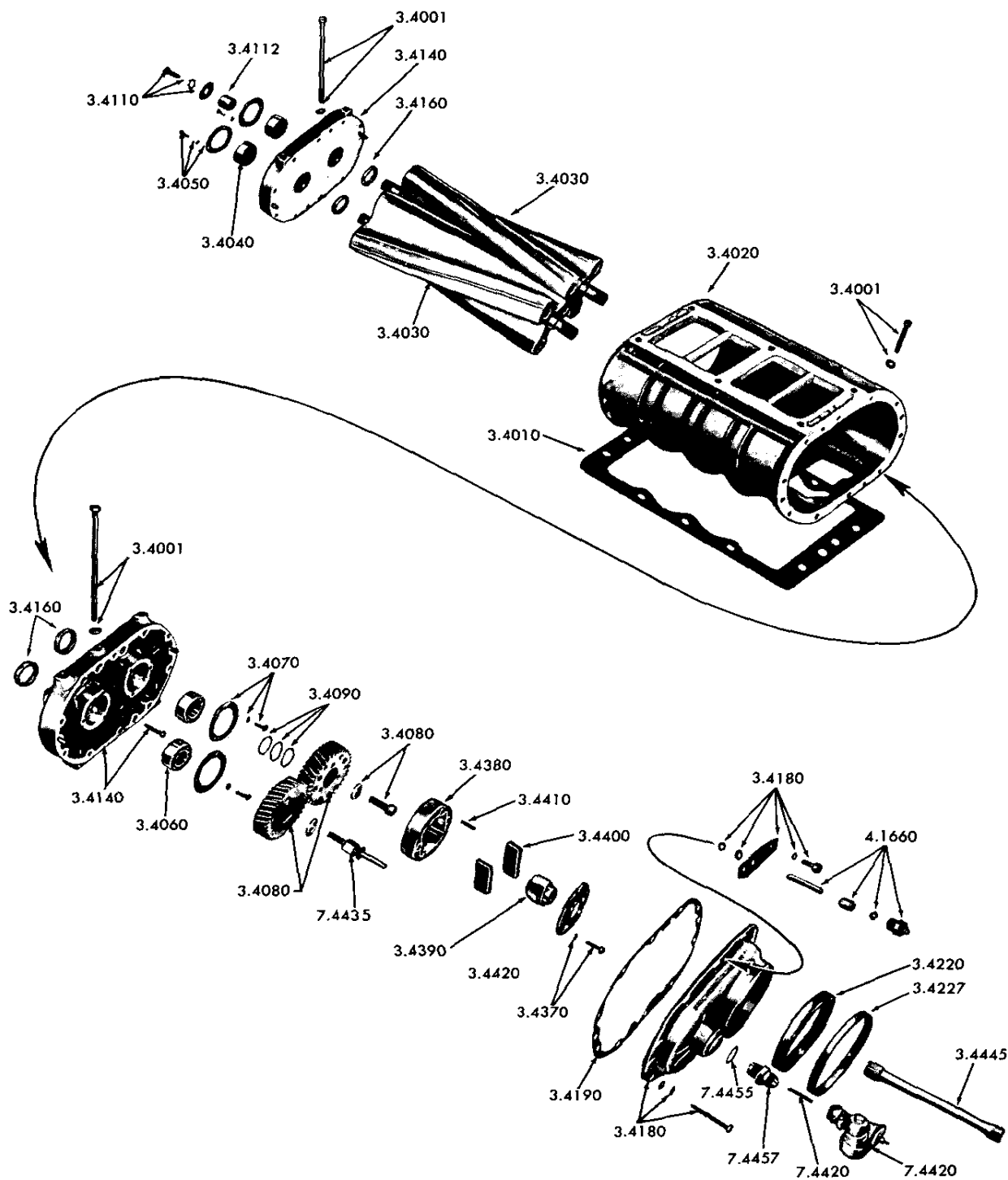


Fig. 34 - Blower



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5157933	Pin, dowel (.308" x 7/8" L.) (rear) .....	2	2	4	4
-	-	5150542	Pin, dowel (.308" x 2" L.) (front) .....	2	2	4	4
34	3.4160	5150220	Seal, blower housing end plate .....	4	4	8	8
34	3.4180	117296	Bolt, 5/16"-18x1 1/2" hex. hd. ....	4	4	8	8
34	3.4180	5123445	Cover, blower housing end plate (front, rear blower) .....			1	
34	3.4180	5123450	Cover, blower housing end plate (rear, front blower) .....			1	
34	3.4180	5196760	Cover Kit, blower end plate (includes rear end plate cover gasket, cover attaching bolts and washers, end plate plug, plug gasket, end plate seal washer and cover reinforcement. Kit 5196761, also includes drive cover, hose and hose clamp) .....	1			
34	3.4180	5196761	Cover Kit, blower end plate .....		1		2
34	3.4180	5196763	Cover Kit, blower end plate (rear of rear blower) .....			1	
34	3.4180	5196762	Cover Kit, blower end plate (rear of front blower and front of rear blower) (includes end plate covers - front and rear, cover gasket, cover, attaching bolts and washers and cover reinforcement) .....			1	
-	-	105456	Gasket, 7/8" copper .....	1	1	1	2
-	-	5168749	Plug, blower housing end plate cover (7/8" - 14) .....	1	1	1	2
34	3.4180	5159714	Washer, blower housing end plate cover .....	8	8	24	16
34	3.4180	179827	Bolt, 5/16"-18x2 1/4" hex. hd. ....	2	2	6	4
34	3.4180	186643	Bolt, 5/16"-18x2 1/16" hex. hd. ....	8	8	24	16
34	3.4180	103320	Lockwasher, 5/16" .....	AR	AR	AR	AR
34	3.4180	5123849	Reinforcement (front, rear cover) .....			2	
34	3.4180	5124521	Reinforcement (rear cover) .....	1	1	1	2
34	3.4180	5124519	Ring, seal (1/8"x5/16") .....	1	1	1	2
34	3.4180	5124520	Washer, blower end plate seal .....	1	1	1	2
34	3.4190	5126499	Gasket, blower housing end plate cover .....	1	1	3	2
-	-	5123257	Cover, blower drive .....		1		2
34	3.4220	5117187	Seal, blower drive cover .....	1		2	
34	3.4220	5128633	Hose, blower drive cover .....		1		2
34	3.4227	5120645	Clamp, blower drive cover packing .....	1		2	4
-	-	5124520	Washer, blower end plate seal .....	1	1	1	
12,35	3.4300	5122918	Gear, blower drive (L.H. helix) .....	1	1	1	1
-	-	5122917	Gear, blower drive (R.H. helix) .....				1
35	3.4302	5117700	Washer, blower drive gear thrust .....	2	2	2	4
35	3.4320	5117704	Washer, blower drive gear hub thrust .....	1	1	1	2
35	3.4330	5117727	Nut, blower drive gear hub .....	1	1	1	2
35	3.4340	5117720	Lockwasher, 1 15/32" blower drive gear .....	1	1	1	2
35	3.4350	5117722	Support Assy., blower drive gear hub .....	1	1	1	2
35	3.4350	181361	Bolt, 3/8"-24x7/8" hex. hd. ....	2	2	2	4
-	-	116103	Washer, 3/8" copper .....	2	2	2	4
35	3.4360	5117116	Gasket, blower drive gear hub support .....	1	1	1	2
-	-	5150344	Coupling Assy., blower drive (includes indented items) .....	1	1	1	2
34	3.4370	186649	Bolt, 5/16"-24x1 5/8" hex. hd. ....	6	6	6	12
34	3.4370	103320	Lockwasher, 5/16" .....	6	6	6	12
34	3.4380	5150345	Support, blower drive coupling .....	1	1	1	2
34	3.4390	5150348	Cam, blower drive coupling .....	1	1	1	2
34	3.4400	5196314	Spring Pack, blower drive coupling (includes springs and seats) .....	1	1	1	2
34	3.4410	5150346	Seat, blower drive coupling spring .....	4	4	4	8
34	3.4420	5150349	Retainer, blower drive coupling spring .....	1	1	1	2
<b>BLOWER DRIVE SHAFT</b>							
34	3.4445	5117724	Shaft, blower drive (5.22" L.) .....	1			
34	3.4445	5117725	Shaft, blower drive (7" L.) .....		1		2



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
34	3.4445	5117726	Shaft, blower drive (5"L.) .....			1	
34	3.4445	5114094	Shaft, blower drive (6.08"L.) (marine units) .....	1			
34	3.4445	5114095	Shaft, blower drive (7.86"L.) (marine units) .....		1		
34	3.4445	5126968	Shaft, blower drive (5.86"L.) (MH marine gear only) .....			1	
34	3.4446	5154637	Ring, blower drive shaft snap .....	1	1	1	2
35	3.4446	5167727	Ring, blower drive shaft snap (marine units) .....	1	1		

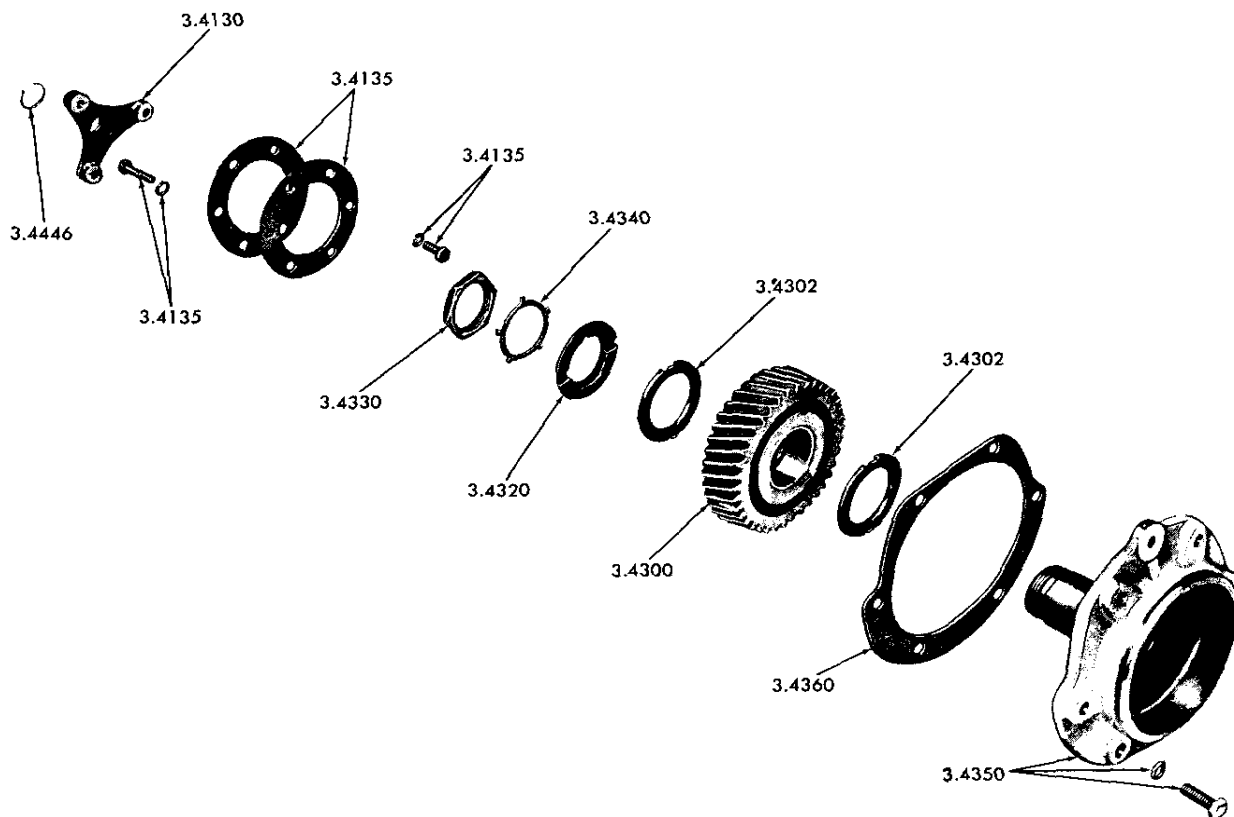


Fig. 35 - Blower Drive Support

OIL PUMP							
38	4.1001	5117609	Pump Assy., oil (R. H.)	1	1		
38	4.1001	5117608	Pump Assy., oil (L. H.)	1	1		
-	-	5122233	Pump Assy., oil			1	
-	-	5122230	Pump Assy., oil (with scavenging section)			1	
-	-	5129876	Pump Assy., oil				1
-	-	5128905	Pump Assy., oil (with scavenging section)				1
-	-	103197	Stud, 3/8"-16-24 x 1 13/16" .....				2
-	-	103198	Stud, 3/8"-16-24 x 2 1/16" .....				2
32	4.1001	186283	Bolt, 3/8"-16 x 3 1/2" hex. hd. ....	2	2		
36	4.1001	186659	Bolt, 1/2"-13 x 3 3/4" hex. hd. ....	6	6		
-	-	103196	Stud, 3/8"-16 x 1 9/16" .....			4	2
36	4.1001	103321	Lockwasher, 3/8" .....	2	2	4	4
36	4.1001	103323	Lockwasher, 1/2" .....	6	6		
-	-	117049	Nut, 3/8"-24 hex. ....			4	4
36	4.1007	5121714	Gasket, oil pump to cylinder block .....	1	1		
-	-	5183323	Shim, oil pump to bearing cap (.005") .....	AR	AR	AR	AR
-	-	5185319	Shim, oil pump to bearing cap (.010") .....	AR	AR	AR	AR



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5185318	Shim, oil pump to bearing cap (.015") .....	AR	AR	AR	AR
36	4.1040	5127610	Body Assy., oil pump (L.H. engine) } (includes shaft and oil	1	1		
36	4.1040	5127611	Body Assy., oil pump (R.H. engine) } seal) .....	1	1		
37	4.1040	5126048	Body Assy., oil pump	1	1		
-	-	5126349	Body Assy., oil pump			1	
37	4.1040	5121922	Body Assy., oil pump (scavenging section) } (includes			1	
-	-	5128242	Body Assy., oil pump				1
37	4.1040	5128244	Body Assy., oil pump (scavenging section) }				1
37	4.1040	192883	Bolt, 3/8"-16 x 5 1/4" hex. hd. ....			5	
-	-	186832	Bolt, 3/8"-16 x 5 3/4" hex. hd. ....				4
37	4.1040	103321	Lockwasher, 3/8" .....			5	4
37	4.1060	5121929	Spacer, oil pump body .....			1	
37	4.1060	5128878	Spacer, oil pump body .....				1
-	-	5126350	Shaft, oil pump drive (9 1/2"L.) .....			1	
37	4.1070	5126351	Shaft, oil pump drive (12 1/2"L.) .....			1	
-	-	5128879	Shaft, oil pump drive (8 13/16"L.) .....				1
37	4.1070	5129886	Shaft, oil pump drive (9 1/2"L.) .....				1
36	4.1080	5117466	Shaft, oil pump driven gear (2 1/2"L.) .....	1	1		
-	-	5126350	Shaft, oil pump driven gear (9 1/2"L.) .....			1	
37	4.1080	5126351	Shaft, oil pump driven gear (12 1/2"L.) .....			1	
37	4.1080	5128880	Shaft, oil pump driven gear (12"L.) .....				1
-	-	5129887	Shaft, oil pump driven gear (8 13/16"L.) .....				1
37	4.1092	106751	Key, 3/16" x 3/4" woodruff .....			3	5
37	4.1092	5121932	Gear, oil pump drive (R.H. helix) .....			2	
37	4.1092	5121931	Gear, oil pump drive (L.H. helix) .....			2	
37	4.1092	5128322	Gear, oil pump drive (R.H. helix) .....				2
37	4.1092	5128321	Gear, oil pump drive (L.H. helix) .....				2
36	4.1095	5196602	Gear Set, oil pump (includes drive and driven gears) .....	1	1		
36	4.1220	5117599	Cover, oil pump outer (R.H. engine) .....	1	1		
36	4.1220	5117600	Cover, oil pump outer (L.H. engine) .....	1	1		
36	4.1220	9409011	Bolt, 5/16"-18 x 3/4" lock .....	7	7		
-	-	5121924	Cover Assy., oil pump (includes bushings) .....			1	
-	-	5129889	Cover Assy., oil pump (includes bushing) .....				1
-	-	186619	Bolt 3/8"-16 x 1 1/8" hex. hd. ....				4
-	-	179848	Bolt 3/8"-16 x 2 1/4" hex. hd. ....			5	

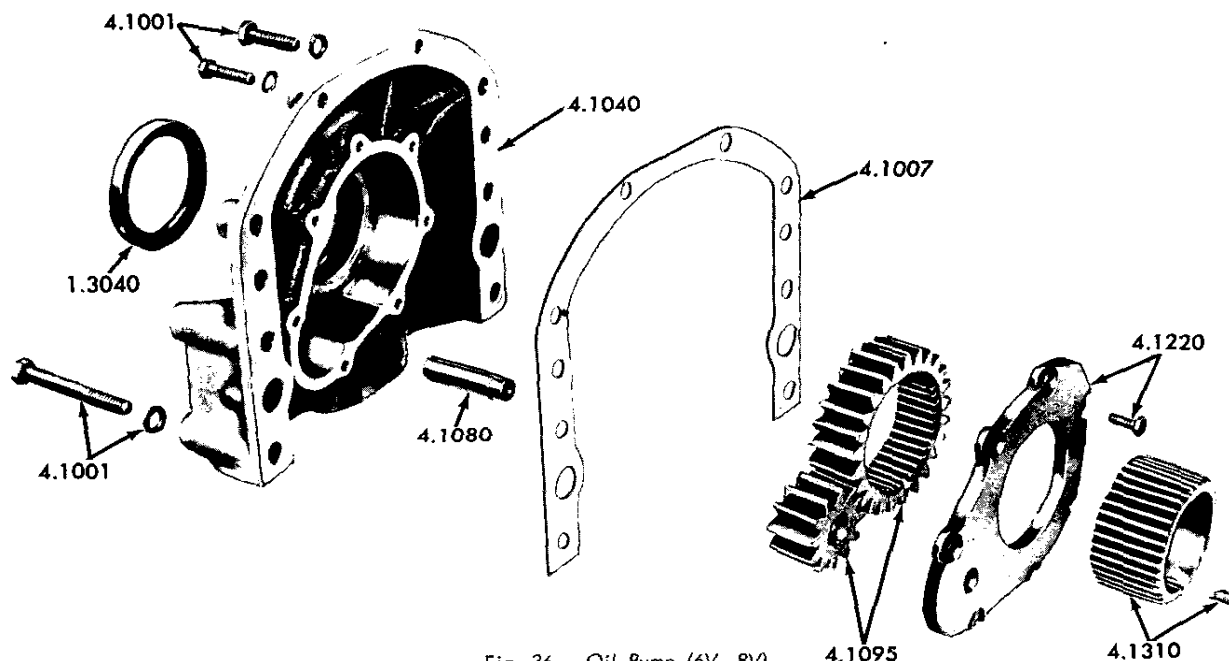


Fig. 36 - Oil Pump (6V, 8V)



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	103321	Lockwasher, 3/8" hex. hd. ....			5	
-	-	5121926	Flange, oil pump cover .....			1	
-	-	179838	Bolt, 3/8"-16 x 7/8" hex. hd. ....			2	
-	-	103321	Lockwasher, 3/8" .....			2	
-	-	5123235	Gasket, oil pump cover flange .....			1	
-	-	5122680	Cover, oil pump pad (2.40" B.C.) .....			1	
-	-	5123662	Cover, oil pump pad (2.88" B.C.) .....			1	
-	-	5123661	Cover, oil pump pad (2.76" B.C.) .....				1
-	-	179838	Bolt, 3/8"-16 x 7/8" hex. hd. ....	2	2	2	2
-	-	179838	Bolt, 3/8"-16 x 7/8" hex. hd. ....			4	
-	-	103321	Lockwasher, 3/8" .....	2	2	AR	2
-	-	5123240	Gasket, oil pump pad cover (2.40" B.C.) .....			1	
-	-	5123660	Gasket, oil pump pad cover (2.76" B.C.) .....			1	1
-	-	5123241	Gasket, oil pump pad cover (2.88" B.C.) .....			1	
7,36	4.1310	5117020	Gear, oil pump drive (on crankshaft) .....	1	1		
-	-	5125958	Gear, oil pump drive (on crankshaft) .....			1	
-	-	5124646	Gear, oil pump drive (on crankshaft) .....				1
-	-	5129881	Bolt, oil pump drive gear .....				6
36	4.1310	106751	Key, 3/16" x 3/4" woodruff .....	1	1	1	3
37	4.1380	5127577	Gear, oil pump drive (on pump) .....			1	
37	4.1380	5128323	Gear, oil pump drive (on pump) .....				1
-	-	106751	Key, 3/16" x 3/4" woodruff .....			1	1

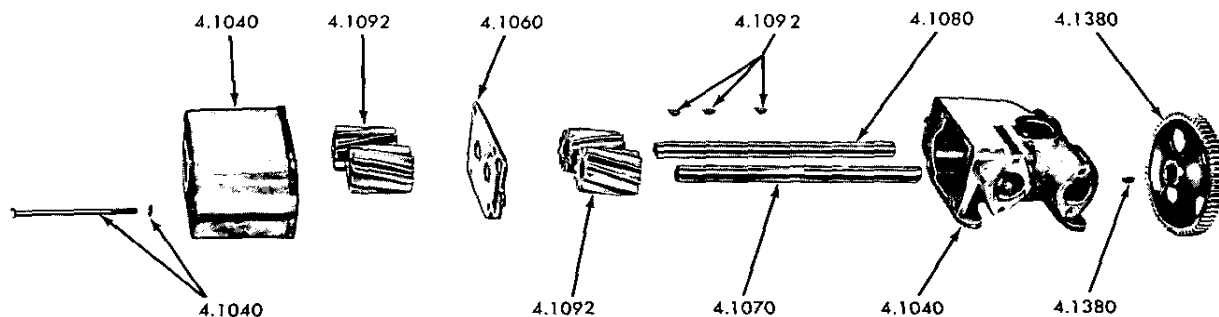


Fig. 37 - Oil Pump

OIL DISTRIBUTION SYSTEM							
-	-	5117338	Pipe, oil pump inlet (16° oil pan) .....	1	1		
38	4.1510	5125904	Pipe, oil pump inlet (30° oil pan) .....	1	1		
-	-	5117814	Pipe, oil pump inlet (45° oil pan) .....	1			
-	-	5125755	Pipe, oil pump inlet .....	1	1		
-	-	5125695	Pipe, oil pump inlet .....	1	1		
39	4.1510	5125760	Pipe, oil pump inlet .....			1	
-	-	5129781	Pipe, oil pump inlet (scavenging) .....				1
-	-	5128872	Pipe, oil pump inlet .....				1
-	-	5126319	Flange, oil inlet (2.75" B.C.) .....	1	1	1	
-	-	5126319	Flange, oil inlet (2.75" B.C.) (scavenging pump) .....			2	
-	-	5128874	Flange, oil pump inlet pipe (scavenging pump) .....				2
-	-	179838	Bolt, 3/8"-16 x 7/8" hex. hd. ....				6
-	-	186619	Bolt, 3/8"-16 x 1 1/8" hex. hd. ....	2	2	2	2
-	-	186612	Bolt, 3/8"-16 x 1 3/4" hex. hd. ....	2	2		3
-	-	179847	Bolt, 3/8"-16 x 2" hex. hd. ....				3
-	-	181365	Bolt, 3/8"-24 x 1 1/8" hex. hd. ....	2	2	2	2
-	-	181374	Bolt, 3/8"-24 x 1 1/2" hex. hd. ....	2	2		
-	-	181377	Bolt, 3/8"-24 x 1 3/4" hex. hd. ....	2	2		3
-	-	181384	Bolt, 3/8"-24 x 2 3/4" hex. hd. ....	2	2		
-	-	103341	Washer, 3/8" flat .....	2	2	2	AR



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	123479	Nut, 3/8"-16 hex. ....				5
-	-	117049	Nut, 3/8"-24 hex. ....	2	2	2	3
-	-	5117242	Gasket, oil pump inlet pipe (at pump) ....	1	1		
-	-	5167380	Gasket, oil pump inlet pipe (at screen cover) ....	1	1	2	
-	-	5123241	Gasket, oil pump inlet pipe (at pump) ....			1	
-	-	5128875	Gasket, oil pump inlet pipe (at scavenging pump) ....				1
-	-	5128891	Gasket, oil pump inlet pipe ....				5
38,39	4.1530	5153286	Screen, oil pump inlet ....	1	1	1	1
39	4.1530	5153286	Screen, oil pump inlet (scavenging pump) ....			2	2
38	4.1540	5125541	Bracket, oil pump screen support (16° oil pan) (1.72" L.) ....	2	2		
38	4.1540	5125912	Bracket, oil pump screen support (30° oil pan) (4.40" L.) ....	2	2		
-	-	5109540	Bracket, oil pump screen support (45° oil pan) (7.27" L.) ....	1			
38	4.1540	5125752	Bracket, oil pump screen support ....	2	2		
-	-	5125920	Bracket, oil pump screen support (45° oil pan) ....	1			

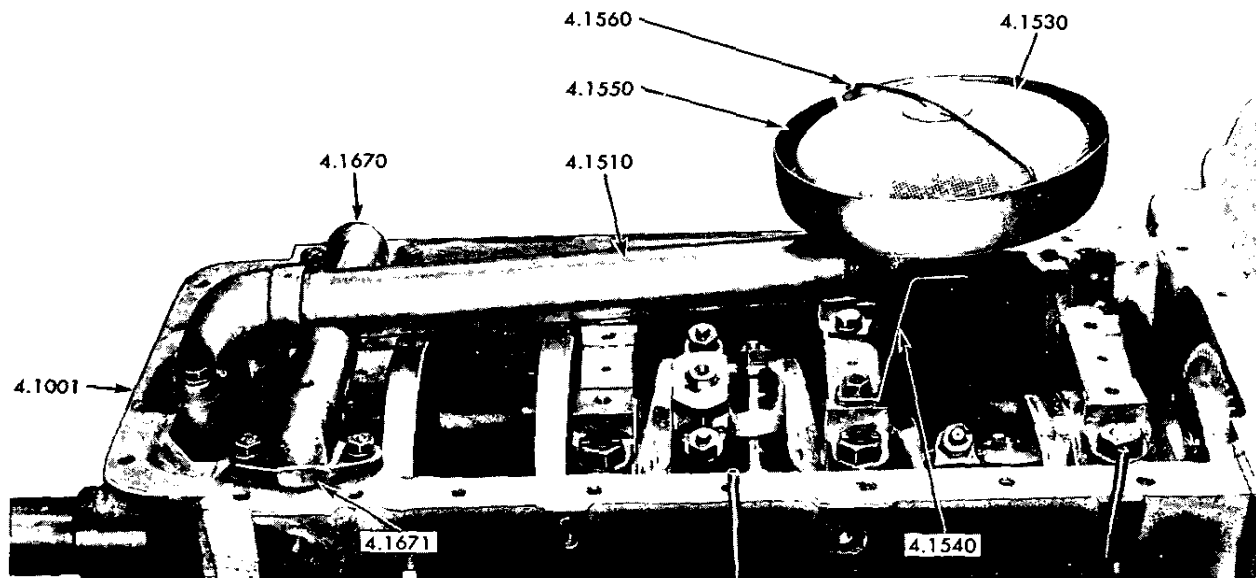


Fig. 38 - Oil Distribution System

38	4.1540	5125693	Bracket, oil pump screen support (3.90" L.) ....	2	2		
38	4.1540	5124780	Bracket, oil pump screen support (2.06" L.) ....	2	2	2	
-	-	181365	Bolt, 3/8"-24x1 1/4" hex. hd. ....	AR	AR	AR	
-	-	5126320	Stop, oil inlet screen ....			1	1
-	-	5126320	Stop, oil inlet screen (scavenging pump) ....			2	2
-	-	179839	Bolt, 3/8"-16x1" hex. hd. ....	2	2	2	
-	-	9409215	Bolt, 3/8"-16x1 1/4" hex. hd. ....			2	
-	-	186627	Bolt, 3/8"-24x1" hex. hd. ....			1	
-	-	103341	Washer, 3/8" flat ....	2	2	4	
38,39	4.1550	5118302	Cover, oil pump inlet screen ....	1	1	1	
39	4.1550	5118302	Cover, oil pump inlet screen (scavenging pump) ....			2	
-	-	5128886	Cover, oil pump inlet screen ....				1
-	-	5128886	Cover, oil pump inlet screen (scavenging pump) ....				2
38,39	4.1560	5153284	Retainer, oil pump inlet pipe screen ....	1	1	1	1
39	4.1560	5153284	Retainer, oil pump inlet pipe screen (scavenging pump) ....			2	2
39	4.1580	5121927	Pipe, oil pump outlet (scavenging pump dev. L. 23 5/8") ....			1	
-	-	5128253	Tube, oil pump outlet (scavenging pump, dev. L. 21.9") ....			1	
-	-	5129924	Pipe, oil pump outlet (to junction block) ....				1
-	-	5128870	Pipe, oil pump outlet (scavenging) ....				1
-	-	5129906	Block, junction (pump to cylinder block) ....				1
-	-	179839	Bolt, 3/8"-16x1" hex. hd. ....			2	8
-	-	103321	Lockwasher, 3/8" ....			2	8



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5123235	Gasket, oil pump outlet pipe (scavenging) .....			1	
-	-	5117269	Gasket, oil pump outlet pipe (junction block) .....				2
-	-	5128869	Gasket, oil pump outlet pipe (1 1/2" I.D.) .....				1
-	-	2206783	Gasket, oil pump outlet pipe (1 3/4" I.D.) .....				2
-	-	5118781	Tube Assy., oil pressure gage (3/16" I.D. x 11 3/16" flex.) .....	1	1	1	1
-	-	1508350	Fitting (1/8" restriction) .....	1	1	1	1
-	-	141539	Bushing, 1/4" x 1/8" red. pipe .....	1	1	1	1
-	-	106649	Elbow, 1/8" street 45 .....	1	1	1	1
34	4.1660	5117718	Pipe, blower drive bearing oil .....	1			
34	4.1660	5117717	Pipe, blower drive bearing oil .....		1		2
34	4.1660	5117716	Pipe, blower drive bearing oil .....			1	
34	4.1660	114629	Connector, 5/16" ball sleeve .....	1	1	1	2
34	4.1660	114631	Sleeve, 5/16" ball .....	1	1	1	2
34	4.1660	114630	Nut, 5/16" ball sleeve .....	1	1	1	2

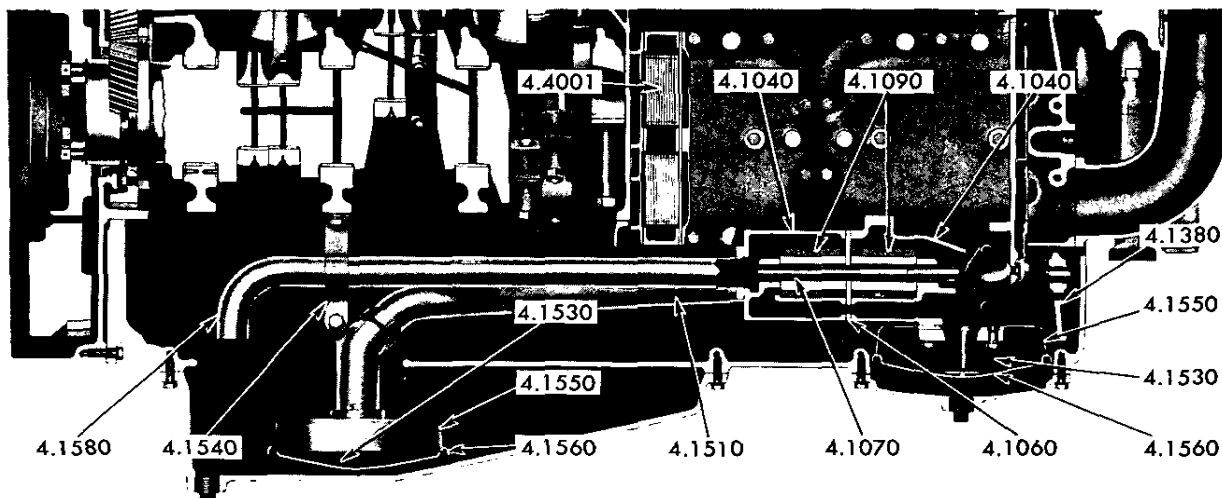


Fig. 39 - Oil Distribution System

OIL PRESSURE REGULATOR							
38	4.1670	5122896	Regulator Assy., oil pressure	1	1		
-	-	5121954	Regulator Assy., oil pressure			1	2
40	4.1670	179839	Bolt, 3/8"-16 x 1" hex. hd.	2	2	2	2

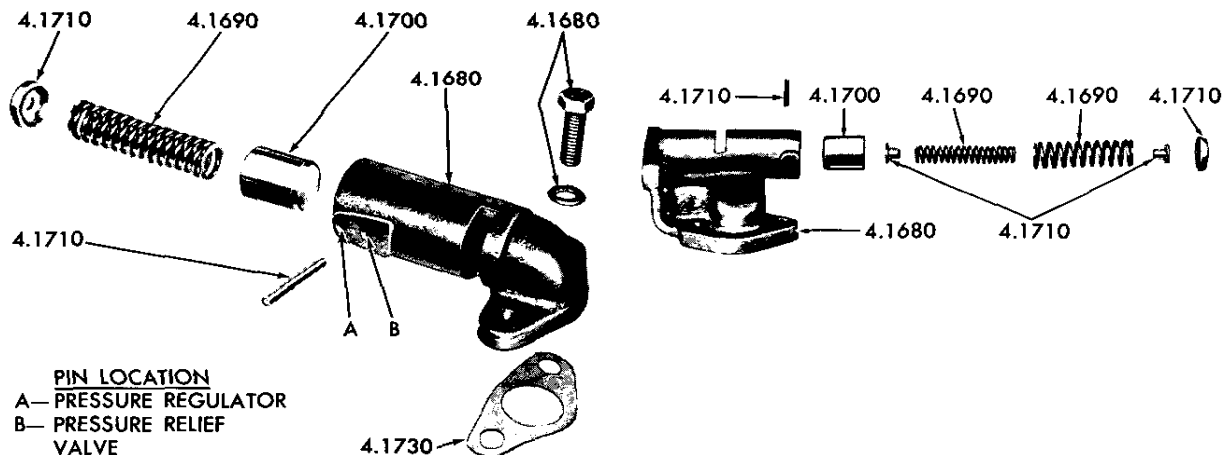


Fig. 40

Fig. 41

Oil Pressure Regulator or Relief Valve



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
40	4.1670	103321	Lockwasher, 3/8"	2	2	2	2
38	4.1671	5122895	Relief Valve Assy., oil pressure (includes indented items)	1	1		1
-	-	5126331	Relief Valve Assy., oil pressure (includes indented items)			1	
-	-	179839	Bolt, 3/8"-16x1" hex. hd.	2	2	2	2
-	-	186622	Bolt, 3/8"-16x1 1/4" hex. hd.			2	
-	-	103321	Lockwasher, 3/8"	2	2	4	4
40	4.1680	5122894	Body, oil pressure regulator or relief valve	2	2		1
41	4.1680	5121953	Body, oil pressure regulator			1	2
41	4.1680	5126328	Body, oil pressure relief valve			1	
40,41	4.1690	5126327	Spring, oil pressure relief valve	2	2	2	3
41	4.1690	5126326	Spring, oil pressure regulator			1	
40,41	4.1700	5117973	Valve, oil pressure regulator and relief	2	2	2	3
40,41	4.1710	5117957	Seat, oil pressure regulator and relief valve	2	2	2	3
-	-	5126325	Seat, oil pressure relief valve			2	
40,41	4.1710	457008	Pin, 3/16"x1 1/2" spring	2	2	2	3
40,41	4.1730	5117269	Gasket, oil pressure regulator	2	2	2	2
-	-	5123240	Gasket, relief valve to oil pump			1	
<b>OIL FILTER</b>							
The proper oil filter assy. and oil filter adaptor for your engine can be interpreted by your GM Diesel dealer or distributor. Furnish him with the model number and type number.							
43	4.2240	-	Filter Assy., oil (includes indented items)	1	1	1	
-	-	186622	Bolt, 3/8"-16x1 1/4" hex. hd.	1	1		
-	-	179849	Bolt, 3/8"-16x2 1/2" hex. hd.	3	3		
-	-	181361	Bolt, 3/8"-24x7/8" hex. hd.	4	4	4	
-	-	103321	Lockwasher, 3/8"	4	4	4	
-	-	103878	Plug, 1/4" pipe	1	1	2	2
42	4.2250	5573014	Element, oil filter	1	2	2	2
3,42,76	4.2280	5574008	Shell, oil filter	1	2	2	2
-	-	5573162	Decal, oil filter shell	1	2	2	2
3,52,76	4.2290	-	Adaptor, oil filter	1	1	1	2
42	4.2300	5571024	Gasket, oil filter cover	1	2	2	2
42	4.2310	5187308	Spring, oil filter	1	2	2	2
42	4.2315	5187309	Retainer, oil filter spring	1	2	2	2
42	4.2315	5120602	Ring, oil filter spring retainer snap	1	2	2	2
-	-	5124833	Gasket, oil filter adaptor to oil cooler			2	
42	4.2330	5187310	Gasket, oil filter cover nut	1	2	2	2
42	4.2330	5574130	Gasket, oil filter cover nut		1	2	2
42	4.2330	5154538	Washer, oil filter cover nut	1	2	2	2
42	4.2350	5123932	Gasket, oil filter adaptor	1			
42	4.2350	5117575	Gasket, oil filter adaptor (4 5/8" L.)			1	

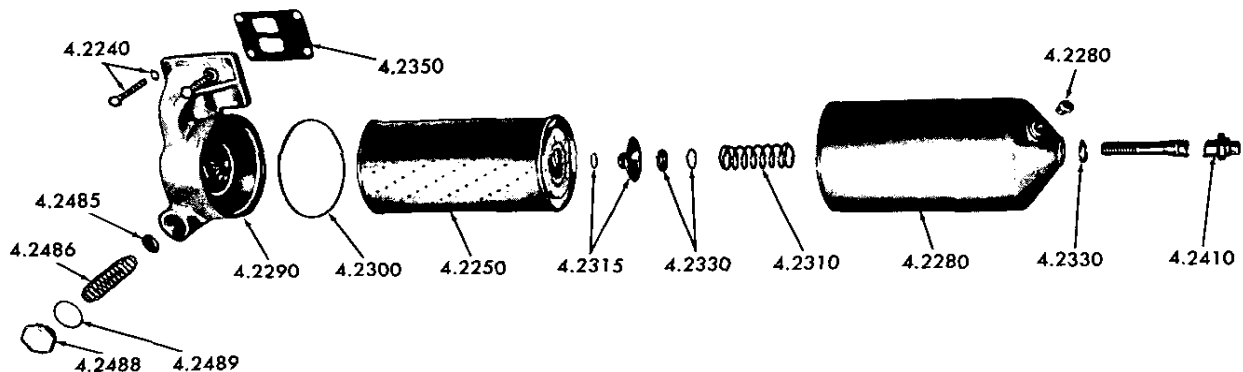


Fig. 42 - Oil Filter



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
42	4.2350	5122533	Gasket, oil filter adaptor (5 3/4" O.D.) .....			1	
-	-	5187312	Gasket, oil filter adaptor .....		1		2
-	-	5124388	Housing, oil filter by-pass valve .....	1	1		
-	-	5123231	Housing, oil filter by-pass valve .....			1	
-	-	186619	Bolt, 3/8"-16 x 1 1/8" hex. hd. ....	2	2		
-	-	186612	Bolt, 3/8"-16 x 1 3/8" hex. hd. ....			4	
-	-	186283	Bolt, 3/8"-16 x 3 1/2" hex. hd. ....	1	1		
-	-	186288	Bolt, 3/8"-16 x 4 1/2" hex. hd. ....	1	1		
-	-	103321	Lockwasher, 3/8" .....	4	4	4	
-	-	5117487	Gasket, oil filter by-pass valve housing .....	1	1		
-	-	5122533	Gasket, oil filter by-pass valve housing .....			1	
42	4.2410	5120740	Stud, oil filter center .....	1	1	2	2
-	-	5122545	Bracket, oil filter mounting .....	1	1		
-	-	5182645	Spacer, oil filter mounting bracket .....	4	4		
-	-	447188	Bolt, 5/16"-18 x 6 3/4" hex. hd. ....	4	4		
-	-	103320	Lockwasher, 5/16" .....	4	4		
42	4.2485	5575088	Valve, oil filter pressure regulator .....	1	1	1	2
42	4.2486	5575087	Spring, oil filter pressure regulator .....	1	1	1	2
42	4.2488	5126686	Plug, oil filter pressure regulator .....	1	1	1	2
42	4.2489	5575086	Gasket, oil filter pressure regulator plug .....	1	1	1	2

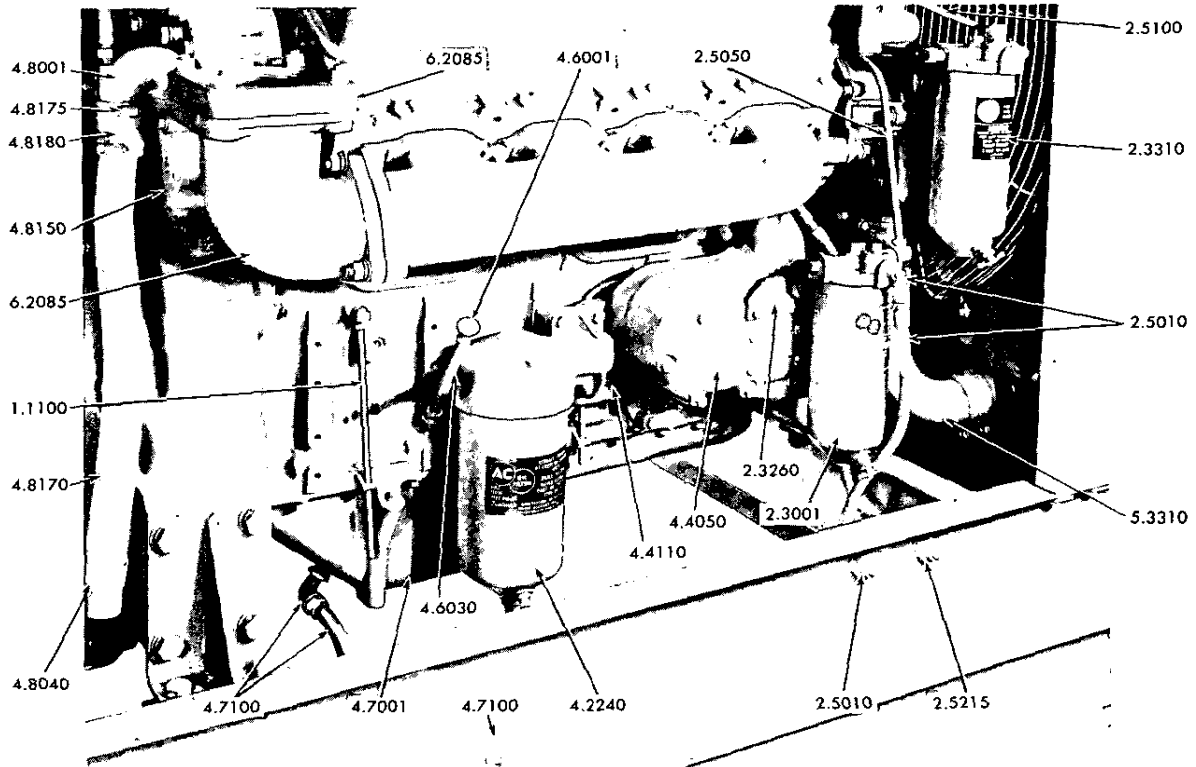


Fig. 43 - Oil Filter and Cooler Mountings

OIL FILTER LINES							
-	-	5122540	Tube, oil filter inlet (dev. L. 13 1/4") .....	1	1		
-	-	5176530	Elbow, 7/8" tube sealastic 90° .....	1	1		
-	-	5176529	Connector, 7/8" tube sealastic .....	1	1		



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5176532	Seal Ring, 7/8" tube sealastic .....	2	2		
-	-	5176531	Nut, 7/8" tube sealastic .....	2	2		
-	-	5122543	Tube, oil filter outlet (dev. L. 21 1/2") .....	1	1		
-	-	5176530	Elbow, 7/8" tube sealastic 90° .....	2	2		
-	-	5176532	Seal Ring, 7/8" tube sealastic .....	2	2		
-	-	5176531	Nut, 7/8" tube sealastic .....	2	2		
<b>OIL COOLER</b>							
44	4.4001	8514600	Core Assy., oil cooler (12 plate) .....	1	2	1	2
-	-	8524267	Core Assy., oil cooler (twin 12 plate, front) .....	1	2	1	2
-	-	8528942	Core Assy., oil cooler (12 plate, rear) .....			1	
44	4.4001	8528885	Core Assy., oil cooler (16 plate) .....		1		1
-	-	5125007	Core Assy., oil cooler (tube type) (non-braking type, torque converter and engine) .....			1	
-	-	5125008	Core Assy., oil cooler (tube type) (braking type, torque converter and engine) .....			1	
-	-	5125009	Core Assy., oil cooler (tube type) (braking type, torque converter only) .....			1	
44	4.4030	5150155	Gasket, oil cooler core inner .....	1	1	1	1
44	4.4030	5117404	Gasket, oil cooler core inner (core to housing) .....	1	1	1	2
44	4.4030	5117280	Gasket, oil cooler core inner (housing to plate) (plate type) .....	1	1	1	2
44	4.4030	5117404	Gasket, oil cooler core inner (front and rear) .....	1	2	2	2
-	-	5124085	Gasket, oil cooler core inner (front) (plate type) .....			1	
-	-	5124806	Gasket, oil cooler core inner (core to core) (tube type) .....			1	
-	-	5187312	Gasket, oil cooler core inner .....				2
44	4.4040	5154215	Gasket, oil cooler core outer .....	1	1	2	
-	-	5117785	Gasket, oil cooler core outer (cover to element) (plate type) .....	1	1	1	
-	-	5175846	Gasket, oil cooler core outer (cover to element) (plate type) .....		1	1	
-	-	5177815	Gasket, oil cooler core outer (cover to element) (plate type) .....	1	1	1	
-	-	5126618	Gasket, oil cooler core outer (cover to element) (tube type) .....			1	
44	4.4050	5117690	Housing, oil cooler (plate type) .....	1		1	
44	4.4050	5117823	Housing, oil cooler (plate type) .....		1		
-	-	5121716	Housing Assy. (includes studs) (plate type) .....	1	1	1	
75	4.4050	5116863	Housing, oil cooler (plate type) .....		1	1	
-	-	5126628	Housing, oil cooler .....				2
-	-	444692	Plug, 1/4" pipe .....	1		1	
-	-	444795	Plug, 3/4" pipe .....	1		3	
-	-	103150	Stud, oil cooler housing .....	2		2	
44	4.4050	215404	Bolt, 5/16" - 18 x 5 3/4" hex. hd. ....	8	8		
-	-	103320	Lockwasher, 3/8" .....	8	8		
44	4.4050	103647	Draincock, 1/4" .....	1	1	1	
-	-	5167775	Cover, oil cooler housing (marine gear) .....	1	1		
68,75	4.4060	5127452	Cover, oil cooler housing (rear) (plate type) .....	1		1	1
-	-	5177907	Cover, oil cooler housing (front) (plate type) .....		1	1	
75	4.4060	5117553	Cover, oil cooler housing (front) (plate type) .....			1	
75	4.4060	5184473	Cover, oil cooler housing (rear) (plate type) .....		1	1	
-	-	5124745	Cover, oil cooler housing (front) (tube type) .....			1	
-	-	5124801	Cover, oil cooler housing (rear) (tube type) .....			1	
-	-	5125300	Plate, oil cooler housing front cover (tube type) .....			1	
-	-	5154215	Gasket, oil cooler housing cover (marine gear) .....	1	1		
-	-	5126321	Gasket, oil cooler housing front cover plate (tube type) .....			1	
-	-	179822	Bolt, 5/16" - 18 x 1 1/2" hex. hd. ....	8	8	4	
-	-	186274	Bolt, 5/16" - 18 x 5" hex. hd. ....	12	12	36	
-	-	215386	Bolt, 5/16" - 18 x 6" hex. hd. ....			3	
-	-	179848	Bolt, 3/8" - 16 x 2 1/4" hex. hd. ....			4	
-	-	179851	Bolt, 3/8" - 16 x 3" hex. hd. ....			20	
-	-	186283	Bolt, 3/8" - 16 x 3 1/2" hex. hd. ....			2	
-	-	179859	Bolt, 7/16" - 14 x 1 1/8" hex. hd. ....			4	
-	-	103320	Lockwasher, 5/16" .....	AR	AR	AR	
-	-	446202	Washer, 5/16" copper .....			2	
-	-	5126953	Plate, oil cooler cover bracket (tube type) (to flywheel hsg.) .....			1	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5126954	Plate, oil cooler cover bracket (tube type) (to oil cooler cover) ..			1	
-	-	5127000	Plate, oil cooler cover bracket (upper) (tube type) .....			1	
-	-	5127001	Plate, oil cooler cover bracket (lower) (tube type) .....			1	
-	-	186619	Bolt, 3/8" - 16 x 1 1/8" hex. hd. ....			5	
-	-	179837	Bolt, 3/8" - 16 x 1 3/4" hex. hd. ....			3	
-	-	271557	Bolt, 5/8" - 11 x 1 3/8" hex. hd. ....			3	
-	-	103321	Lockwasher, 3/8" .....			AR	
-	-	5126618	Gasket, oil cooler cover bracket (tube type) .....			1	
-	-	5124857	Cover, oil filter return hole (tube type) .....			1	
-	-	442733	Bolt, 1/2" - 13 x 1 1/4" hex. hd. ....			4	
-	-	103323	Lockwasher, 1/2" .....			4	
-	-	5124812	Gasket, oil filter return hole cover (tube type) .....			1	
-	-	5114457	Baffle, oil cooler .....	1	1		
-	-	5124799	Bracket, oil cooler housing support (tube type) .....			1	
-	-	179839	Bolt, 3/8" - 16 x 1" hex. hd. ....			4	
-	-	5117680	Adaptor, oil cooler (plate type) .....	1			
44	4.4110	5117467	Adaptor, oil cooler (plate type) .....	1	1		
-	-	5123882	Adaptor, oil cooler (marine gear) .....	1	1		
-	-	5122850	Adaptor, oil cooler (plate type) .....			1	
-	-	5117057	Adaptor, oil cooler (rear) (plate type) .....			1	
-	-	5126258	Adaptor, oil cooler (front) (plate type) .....		1	1	
-	-	5124636	Adaptor, oil cooler (rear) .....		1		
-	-	5126259	Adaptor, oil cooler (front) .....				1
-	-	5126257	Adaptor, oil cooler (rear) .....				1
44	4.4110	138244	Screw, 3/8" - 16 x 1 1/2" hex. socket hd. ....		1	2	2
-	-	186625	Bolt, 5/16" - 18 x 7/8" hex. hd. ....	1		5	
-	-	179839	Bolt, 3/8" - 16 x 1" hex. hd. ....	2		2	
-	-	186622	Bolt, 3/8" - 16 x 1 1/4" hex. hd. ....	2		2	
44	4.4110	186628	Bolt, 3/8" - 16 x 1 1/2" hex. hd. ....	2	2	5	10
44	4.4110	179846	Bolt, 3/8" - 16 x 1 7/8" hex. hd. ....	4	4		
44	4.4110	103321	Lockwasher, 3/8" .....	AR	AR	AR	AR
44	4.4115	5117535	Gasket, oil cooler adaptor to block .....	2	2	2	4
-	-	5159430	Gasket, oil cooler adaptor to block .....	1	2	1	
-	-	5117404	Gasket, oil cooler adaptor to block (front) .....		1	1	
-	-	5122433	Gasket, oil cooler adaptor to block (rear) (plate type) .....			1	
-	-	5126323	Gasket, oil cooler adaptor to block (5/16" O.D.) .....	1	2	2	
44	4.4115	5126280	Spacer, oil cooler adaptor to block (plate type) .....	2	2	1	2
-	-	5117681	Cover, oil cooler adaptor (plate) .....	1	1		
-	-	5125597	Cover, oil cooler adaptor (plate) (plate type) .....	1	1		
-	-	5117711	Gasket, oil cooler adaptor cover .....	1	1		

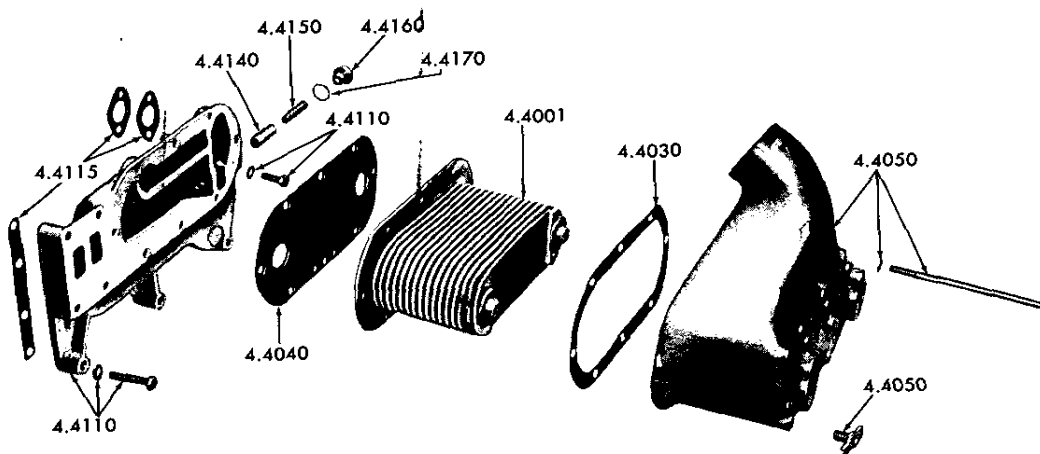


Fig. 44 - Oil Cooler



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5125596	Gasket, oil cooler adaptor cover .....	1	1		
-	-	5117404	Gasket, oil cooler adaptor cover (plate type) .....			1	
-	-	5125586	Valve Assy., oil cooler by-pass (includes valve, spring, retainer, and screw) (tube type) .....			1	
44	4.4140	5575088	Valve, oil cooler by-pass (tube type) .....			1	
44	4.4140	5177777	Valve, oil cooler by-pass (plate type) .....	1	1	1	2
44	4.4150	5177778	Spring, oil cooler by-pass valve (plate type) .....	1	1	1	2
44	4.4150	5575127	Spring, oil cooler by-pass valve (tube type) .....			1	
44	4.4160	5574736	Retainer, oil cooler by-pass valve (tube type) .....			1	
-	-	121832	Screw, #8 - 32 x 3/8" .....			1	
44	4.4160	5177772	Plug, oil cooler by-pass valve (plate type) .....	1	1	1	
-	-	5127797	Plug, oil cooler by-pass valve .....				2
44	4.4170	5177773	Gasket, oil cooler by-pass valve plug (plate type) .....	1	1	1	2
44	4.4176	5125587	Tube, oil cooler by-pass (tube type) .....			1	
-	-	5124859	Flange, oil cooler by-pass tube (tube type) .....			2	
-	-	179822	Bolt, 5/16" - 18 x 1 1/2" hex. hd. ....	2	2		
-	-	186283	Bolt, 3/8" - 16 x 3 1/2" hex. hd. ....			4	
-	-	186289	Bolt, 3/8" - 16 x 5" hex. hd. ....			2	
-	-	186658	Bolt, 3/8" - 24 x 5 1/2" hex. hd. ....			2	
-	-	5124798	Gasket, oil cooler by-pass tube flange (tube type) .....			2	
-	-	5193598	Seal Ring, oil cooler by-pass tube flange (tube type) .....			2	
-	-	5124797	Cover, oil cooler by-pass hole (tube type) .....			4	
-	-	186282	Bolt, 3/8" - 16 x 3 1/4" hex. hd. ....			4	
-	-	186283	Bolt, 3/8" - 16 x 3 1/2" hex. hd. ....			4	
-	-	103321	Lockwasher, 3/8" .....			8	
-	-	5124798	Gasket, oil cooler by-pass hole cover (tube type) .....			4	
-	-	5124466	Elbow, oil cooler water inlet .....	1	1		
-	-	5122422	Elbow, oil cooler water inlet (plate type) .....	1		1	
-	-	5121724	Elbow, oil cooler water inlet .....	1	1		
3	4.4211	5124927	Elbow, oil cooler water inlet (with 1/2" P.T.) .....	1	1		
-	-	5124821	Elbow, oil cooler water inlet (tube type) .....			1	
-	-	5127646	Tube, oil cooler water inlet .....				1
76	4.4211	5126057	Elbow, oil cooler water inlet (with 2 1/2" and 3 1/2" dia. holes)				1
76	4.4211	5127462	Elbow, oil cooler water inlet (with 2 1/2" dia. hose)				1
-	-	186619	Bolt, 3/8" - 16 x 1 1/8" hex. hd. ....	4	4	4	6
-	-	450517	Bolt, 3/8" - 16 x 4 3/4" hex. hd. ....				2
-	-	103647	Draincock, 1/4" .....				1
-	-	103321	Lockwasher, 3/8" .....	AR	AR	AR	AR
-	-	5117317	Gasket, oil cooler water inlet elbow (rectangular) (plate type) .....	1	1	1	2
-	-	5117476	Gasket, oil cooler water inlet elbow (triangular) .....	1	1		
-	-	5124822	Gasket, oil cooler water inlet elbow (tube type) .....			1	
3	4.4213	5120204	Hose, oil cooler water inlet (2 7/8" I.D. x 2.24") .....	1	1	1	
3	4.4213	5117809	Hose, oil cooler water inlet (2 3/8" I.D. x 3 1/2") .....	1	1		
-	4.4213	5129094	Hose, oil cooler water inlet (2 1/2" I.D. x 3 1/4" L.) .....				1
-	-	5127658	Hose, oil cooler water inlet (3 1/2" I.D. x 3 1/4" L.) .....				2
3	4.4213	5188036	Clamp, hose (2 9/16" - 3 1/2" range) .....	2	2	2	
3	4.4213	9139809	Clamp, hose (2 1/16" - 3" range) .....	2	2	2	
-	4.4214	9139813	Clamp, oil cooler water inlet hose (4" dia. hose) .....				8
13,21	4.4220	5117255	Elbow, oil cooler water outlet (rear) .....	1	1	1	1
-	-	5129834	Elbow, oil cooler water (rear) (with 3/4" P.T.) .....				1
-	4.4220	5127638	Elbow, oil cooler water (front) .....				1
-	-	5129835	Elbow, oil cooler water (front) (with 3/4" P.T.) .....				1
-	-	120369	Nut, 3/8" - 24 hex. ....				2
-	-	179839	Bolt, 3/8" - 16 x 1" hex. hd. ....	4	4	4	6
-	-	103321	Lockwasher, 3/8" .....	4	4	4	8
-	-	5117254	Gasket, oil cooler water outlet elbow (tube type) .....	1	1	1	1
-	-	5117041	Seal, oil cooler water outlet (3 1/2" O.D. x 5/8") .....	1	1	1	2
-	-	5124884	Flange, oil cooler water outlet (tube type) .....			1	
-	-	179839	Bolt, 3/8" - 16 x 1" hex. hd. ....			4	
-	-	116103	Washer, 3/8" copper .....			1	
-	-	103321	Lockwasher, 3/8" .....			4	
-	-	5117254	Gasket, oil cooler water outlet flange (tube type) .....			1	
-	-	9139813	Clamp, 4" hose .....	1	1	1	2
-	-	5125598	Flange, oil cooler water hole .....	1	1		



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	186622	Bolt, 3/8" - 16 x 1 1/4" hex. hd. ....	2	2		
-	-	103321	Lockwasher, 3/8" ....	4	4		
-	-	117049	Nut, 3/8" hex. ....	2	2		
-	-	5125599	Gasket, oil cooler water hole flange ....	1	1		
-	-	5124819	Block, oil cooler oil junction (tube type) ....			1	
-	-	5124820	Gasket, oil cooler oil junction block (tube type) ....			2	
-	-	179839	Bolt, 3/8" - 16 x 1" hex. hd. ....			12	
-	-	103321	Lockwasher, 3/8" ....			12	
52,75	4.4330	5110516	Hose, marine gear oil outlet (59" flex.) ....	1	1	1	
-	-	5114962	Hose, marine gear oil outlet (28 3/8" flex.) (pump to filter) ....	1	1		
4	4.4330	5108460	Hose, marine gear oil outlet (92" flex.) (pump to cooler) ....		1		1
-	-	5183079	Adaptor, marine gear oil outlet hose (1" dia. hose) ....	3	3	1	1
-	-	144034	Bushing, 1/2" x 3/4" red. pipe ....	2	2		
4,62	4.4335	5114051	Hose, marine gear oil inlet (cooler to selector valve) ....	1			
4,62	4.4335	5110516	Hose, marine gear oil inlet (cooler to selector valve) (59" flex.)..		1		
52,75	4.4335	5114071	Hose, marine gear oil inlet (45" flex.) ....			1	
75	4.4335	5112119	Elbow, 1/2" x 90° ....	1		2	
75	4.4335	108686	Elbow, 1/2" street 90° ....			2	
75	4.4335	120062	Bushing, 1/2" x 1" red. pipe ....			2	
-	-	5151189	Clip (3/4" dia.) marine gear hose ....	5	5	5	
-	-	5184291	Clip (1 1/4" dia.) marine gear hose ....	1	1		
-	-	5181325	Support, clip ....	1	1		
-	-	5125788	Hose, marine gear to oil pressure pump (23 1/2" flex.) ....	1	1		
-	-	5183079	Adaptor (1" dia. hose) marine gear to oil pressure pump hose ...	1	1		
-	-	108687	Elbow, 1" street 90° ....	2	2		
<b>OIL FILLER TUBE</b>							
-	-	5181999	Tube, oil filler (mounted at top of pan) ....	1	1	1	
-	-	5128650	Tube, oil filler (mounted at side of pan) ....			1	
-	-	186282	Bolt, 3/8" - 16 x 3 1/4" hex. hd. ....			2	
-	-	186283	Bolt, 3/8" - 16 x 3 1/2" hex. hd. ....			2	
-	-	103321	Lockwasher, 3/8" ....			2	
-	-	5128647	Bracket, oil filler tube clamp ....			1	
-	-	5113863	Clamp, oil filler tube ....			1	
-	-	179837	Bolt, 3/8" - 16 x 3/4" hex. hd. ....			2	
-	-	103321	Lockwasher, 3/8" ....			2	
-	-	117062	Nut, 3/8" - 16 hex. ....			1	
-	-	5168175	Adaptor, oil filler ....	1	1	1	
-	-	186282	Bolt, 3/8" - 16 x 3 1/4" hex. hd. ....	2	2	2	
-	-	103321	Lockwasher, 3/8" ....	2	2	2	
-	-	5168176	Gasket, oil filler adaptor ....	1	1	1	
-	-	1543853	Cap, oil filler (includes gasket) (snap type) ....	1	1	1	
3,16	4.5010	5117362	Cap, oil filler (squeeze type) ....	1	1	1	
-	-	1543857	Gasket, oil filler cap ....	1	1	1	
-	-	5150147	Strainer, oil filler ....	1	1	1	
<b>DIPSTICK</b>							
45	4.6001	5125561	Dipstick (X-10.5", Y-9.74", Z-9.12") ....	1			
45	4.6001	5125975	Dipstick (X-11.25", Y-10.66", Z-9.6") ....	1			
45	4.6001	5125976	Dipstick (X-12.5", Y-11.82", Z-10.66") ....	1			
45	4.6001	5127208	Dipstick (X-44.25", Y-41.75", Z-40.68") ....	1			
45	4.6001	5128169	Dipstick (X-17.75", Y-16.66", Z-15.60") ....	1			
45	4.6001	5128170	Dipstick (X-18.50", Y-17.58", Z-16.52") ....	1			
45	4.6001	5126365	Dipstick (X-26.75", Y-25.60", Z-24.12") ....	1	1		
45	4.6001	5126895	Dipstick (unmarked) (X-28"L.) ....	1	1		
45	4.6001	5126837	Dipstick (X-24.5", Y-23.44", Z-22.22") ....	1	1		
45	4.6001	5128171	Dipstick (X-19.5", Y-18.74", Z-17.58") ....	1	1		
45	4.6001	5121218	Dipstick (X-13.12", Y-12.68", Z-11.5") ....			1	
45	4.6001	5125977	Dipstick (X-11.25", Y-10.28", Z-9.28") ....			1	
45	4.6001	5128749	Dipstick (X-24.25", Y-23.24", Z-21.86") ....			1	



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
45	4.6001	5125978	Dipstick (X-12.5", Y-12.06", Z-10.94") .....		1		
45	4.6001	5125979	Dipstick (X-17.75", Y-17.2", Z-16.20") .....		1		
45	4.6001	5129031	Dipstick (X-29.44", Y-28.38", Z-27.18") .....		1		
45	4.6001	5117792	Dipstick (X-12.68", Y-12.06", Z-10.94") .....		1		
45	4.6001	5126046	Dipstick (X-14.50", Y-13.72", Z-12.34") .....			1	
45	4.6001	5124314	Dipstick (X-15.5", Y-13.85", Z-12.47") .....			1	
45	4.6001	5124124	Dipstick (X-18.25", Y-16.31", Z-15") .....			1	
45	4.6001	5100168	Dipstick (X-28.56", Y-27.75", Z-28") .....			1	
45	4.6001	5108616	Dipstick (X-35.34", Y-31.74", Z-30.30") .....				1
45	4.6001	5129407	Dipstick (X-17.75", Y-16.44", Z-14.00") .....				1
45	4.6020	5151430	Guide, dipstick .....	1	1	1	1
45	4.6030	5125970	Adaptor, dipstick (dev. L. 6.38") .....	1			1
45	4.6030	5125971	Adaptor, dipstick (dev. L. 12.38") .....	1	1		
45	4.6030	5126322	Adaptor, dipstick (dev. L. 22.70", 7/16" O.D.) .....	1	1		
45	4.6030	5126892	Adaptor, dipstick (dev. L. 22.78", 1/2" O.D.) .....	1	1		
45	4.6030	5126893	Adaptor, dipstick (dev. L. 24.56") .....	1	1		
45	4.6030	5124440	Adaptor, dipstick (dev. L. 11.58") .....		1		
45	4.6030	5126139	Adaptor, dipstick (dev. L. 20.62") .....		1		
45	4.6030	5153992	Adaptor, dipstick (dev. L. 11.5") .....			1	
45	4.6030	5127206	Adaptor, dipstick (dev. L. 38.10") .....	1			
45	4.6030	5128240	Adaptor Assy., dipstick (length 6.18") .....		1		
45	4.6030	5120477	Adaptor Assy., dipstick (length 11.18") .....			1	
45	4.6030	5126142	Adaptor Assy., dipstick (length 27.38") .....			1	
-	-	5100110	Adaptor, dipstick (dev. L. 22.25") .....				1
-	-	137408	Connector, 7/16" inv. fl. tube .....	1	1	1	1
-	-	137400	Nut, 7/16" inv. fl. tube .....	1	1	1	
-	-	137401	Nut, 1/2" inv. fl. tube .....	1	1	1	
-	-	5161873	Clip, dipstick (7/16" dia. tube, 3/8" bolt) .....	1	1	1	
-	-	5153473	Clip, dipstick (1/2" dia. tube, 3/8" bolt) .....	1	1	1	1
-	-	5151108	Clip, dipstick (1/2" dia. tube, 1/2" bolt) .....	1	1	1	
-	-	5168001	Clip, dipstick (1/2" dia. tube, 7/16" bolt) .....	1	1	1	
-	-	5188969	Bracket, dipstick clip support .....	1	1		
-	-	5160629	Spacer, dipstick clip .....	1	1		
-	-	5163834	Washer, 5/16" flat .....	2	2		
-	-	181333	Bolt, 3/16" - 24 x 5/8" hex. hd. ....	1	1		
-	-	186619	Bolt, 3/8" - 16 x 1 1/8" hex. hd. ....			1	
-	-	103320	Lockwasher, 5/16" .....	1	1		
-	-	103321	Lockwasher, 3/8" .....			1	
-	-	121917	Nut, 5/16" - 24 hex. ....	1	1		
-	-	117062	Nut, 3/8" - 16 hex. ....			1	

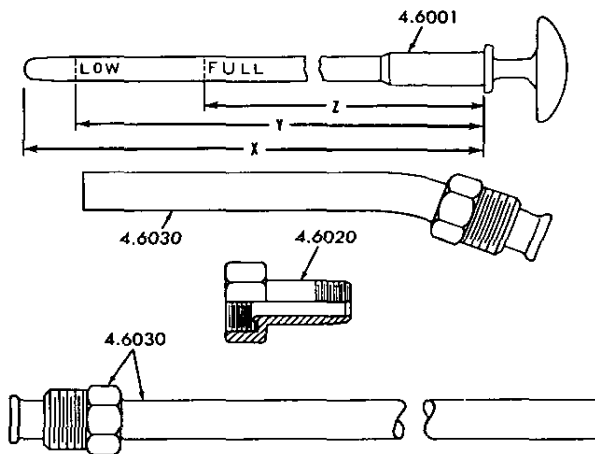


Fig. 45 - Dipstick

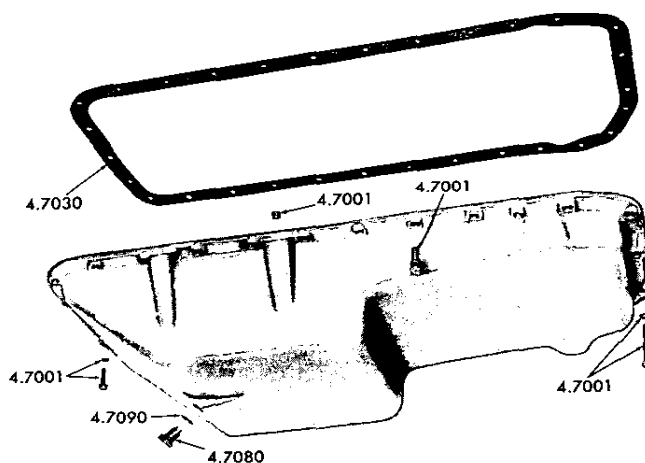


Fig. 46 - Oil Pan



# G M D I E S E L

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
OIL PAN							
-	-	5125668	Pan, oil (for 10° inclination) (dipstick in block, sump at rear, drain at bottom) .....	1			
-	-	5125667	Pan, oil (for 10° inclination) (dipstick in block, sump at rear, drain on right side) .....	1			
46	4.7001	5117538	Pan, oil (for 15° inclination) .....	1			
-	-	5126818	Pan, oil (for 10° inclination) (dipstick in pan, sump at rear, drain on right side) .....	1			
-	-	5129145	Pan, oil (for 10° inclination) (dipstick in block, sump at rear, drain at bottom, with air compressor drain) .....	1			
-	-	5125526	Pan, oil (for 10° inclination) (dipstick in block, sump at rear, drain at bottom) .....		1		
-	-	5125527	Pan, oil (for 10° inclination) (dipstick in block, sump at rear, drain on right side) .....		1		
46	4.7001	5117542	Pan, oil (for 30° inclination) .....		1		
-	-	5126828	Pan, oil (for 10° inclination) (dipstick in pan on left side, sump at rear, drain on right side) .....		1		
-	-	5126827	Pan, oil (for 10° inclination) (dipstick in pan on right side, sump at rear, drain on right side) .....		1		
-	-	5129146	Pan, oil (for 10° inclination) (dipstick in block, sump at rear, drain at bottom, with air compressor drain) .....		1		
46	4.7001	186619	Bolt, 3/8" - 16 x 1 1/8" hex. hd. ....	2			
-	-	186622	Bolt, 3/8" - 16 x 1 1/4" hex. hd. ....	4	4		
46	4.7001	446564	Bolt, 3/8" - 16 x 7/8" hex. hd. (with lockwasher) .....	24	28		
46	4.7001	443855	Bolt, 3/8" - 16 x 1 3/8" hex. hd. (with lockwasher) .....		24		
-	-	186288	Bolt, 3/8" - 16 x 4 1/2" hex. hd. ....	2	2		
-	-	187491	Bolt, 3/8" - 16 x 5 1/2" hex. hd. ....	2	2		
-	-	106263	Washer, 3/8" flat .....	4	4		
-	-	103321	Lockwasher, 3/8" .....	6	2		
-	-	5126249	Pan, oil upper .....			1	
75	4.7010	5196823	Pan Assy., oil upper .....			1	
76	4.7010	5129652	Pan, oil upper .....				1
-	-	186622	Bolt, 3/8" - 16 x 1 1/4" hex. hd. ....				4
-	-	443855	Bolt, 3/8" - 16 x 1 3/8" hex. hd. ....				32
-	-	186288	Bolt, 3/8" - 16 x 4 1/2" hex. hd. ....				4
-	-	450517	Bolt, 3/8" - 16 x 4 3/4" hex. hd. ....				8
-	-	187491	Bolt, 3/8" - 16 x 5 1/2" hex. hd. ....				4
-	-	103341	Washer, 3/8" flat .....				2
-	-	103321	Lockwasher, 3/8" .....				20
-	-	444692	Plug, 1/4" pipe .....			1	
-	-	186622	Bolt, 3/8" - 16 x 1 1/4" hex. hd. ....			32	4
-	-	114926	Bolt, 3/8" - 16 x 4 1/4" hex. hd. ....			6	
-	-	186832	Bolt, 3/8" - 16 x 5 3/4" hex. hd. ....			2	
-	-	106263	Washer, 3/8" flat .....			4	
-	-	103321	Lockwasher, 3/8" .....			40	
33,75	4.7020	5153153	Pan, oil lower .....			1	
76	4.7020	5190901	Pan Assy., oil lower (front) (includes plug 53688 and gasket 840277) .....				1
-	-	5111284	Pan, oil lower (rear) .....				1
-	-	5129787	Baffle, oil pan - lower (front) .....				1
-	-	5129786	Baffle, oil pan - lower (rear) .....				1
-	-	103880	Plug, 1/2" pipe .....				2
-	-	444692	Plug, 1/4" pipe .....			2	
-	-	189697	Bolt, 5/16" - 18 x 1" hex. hd. (with lockwasher) .....			22	48
46	4.7030	5196532	Gasket Set, oil pan to cylinder block .....	1			
46	4.7030	5196533	Gasket Set, oil pan to cylinder block .....		1		
46	4.7030	5109915	Gasket Set, oil pan to cylinder block .....			1	
-	-	5153256	Gasket, lower oil pan .....			1	
-	-	5150115	Gasket, oil pan - lower (front) .....				1
-	-	5150116	Gasket, oil pan - lower (rear) .....				1
-	-	5125635	Gasket, oil pan - lower .....			1	1



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
46	4.7080	103869	Plug, 3/4" pipe (oil pan drain) .....	1	1	2	
46	4.7080	5158868	Plug, oil pan drain (18 mm) .....	1			
46	4.7080	53688	Plug, oil pan drain (18 mm magnetic) .....		1		1
46	4.7090	840277	Gasket, oil pan drain plug .....	1	1		1
-	-	5117914	Cover, oil pan .....			1	
-	-	5125624	Cover, oil pan .....				1
-	-	189697	Bolt, 5/16" - 18 x 1" hex. hd. (with lockwasher) .....			14	
-	-	179838	Bolt, 3/8" - 16 x 7/8" hex. hd. ....	4	4		
-	-	103321	Lockwasher, 3/8" .....	4	4		
-	-	5121963	Gasket, oil pan cover .....			1	
-	-	5124796	Gasket, oil pan cover .....				1
<b>VENTILATING SYSTEM</b>							
5	4.8001	5117963	Pipe, breather (9.34" L.) .....	1	1	1	
-	-	5127508	Pipe, breather (15.96" L.) .....	1	1	1	
21	4.8001	5121766	Pipe, breather (32.34" L.) .....	1	1	1	
53	4.8001	5123409	Pipe, breather (includes flange) .....	1	1		
52,75	4.8001	5123038	Pipe, breather (includes flange) .....			1	
-	-	5126271	Pipe, breather (includes flange) (marine) .....			1	
47	4.8001	5124222	Pipe, breather .....				2
43,47	4.8001	5124730	Elbow, breather .....	1	1	1	
47	4.8001	179839	Bolt, 3/8" - 16 x 1" hex. hd. ....	2	2	2	4
47	4.8001	103321	Lockwasher, 3/8" .....	2	2	2	4
-	-	5121894	Gasket, breather pipe (with slotted opening) .....	1	1	1	
49	4.8020	5117636	Gasket, breather pipe (with round opening) .....	1	1	1	2
-	-	5184291	Clip (3/8" bolt - 1 19/32" L.) .....	1	1	1	
4,47	4.8050	5117571	Body, breather .....	1	1	1	2
47,53	4.8050	179839	Bolt, 3/8" - 16 x 1" hex. hd. ....	1	1	3	8
47,53	4.8050	108618	Bolt, 3/8" - 16 x 2 3/4" hex. hd. ....	1	1	1	2
47,53	4.8050	119092	Bolt, 3/8" - 16 x 4 3/4" hex. hd. ....	3	3	3	6
47,53	4.8050	192882	Bolt, 3/8" - 16 x 6 1/4" hex. hd. ....	1	1	1	2
47	4.8050	103321	Lockwasher, 3/8" .....	6	6	6	12

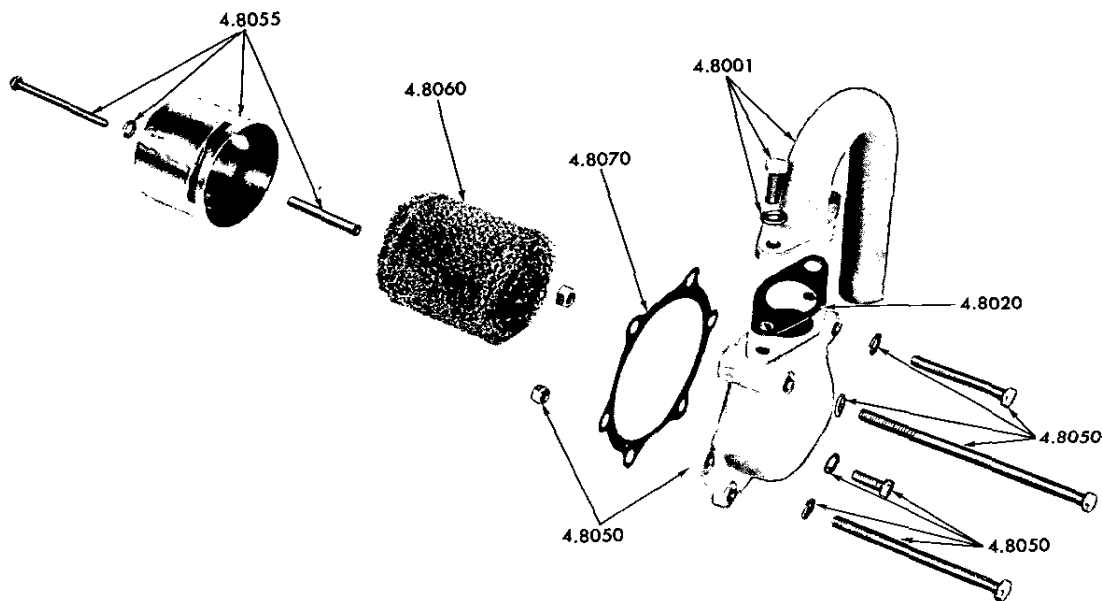


Fig. 47 - Engine Breather



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
47	4.8050	117049	Nut, 3/8" - 16 hex. ....	4	4	4	8
47	4.8055	5117524	Shell, breather .....	1	1	1	2
47	4.8055	5117523	Spacer, breather shell (9/16" x 3 1/8") .....	1	1	1	2
47	4.8055	186272	Bolt, 5/16" - 18 x 4" hex. hd. ....	1	1	1	2
47	4.8055	120393	Washer, 5/16" plain .....	1	1	1	2
47	4.8060	5129604	Pad, breather (filter) .....	1	1	1	2
47	4.8070	5122227	Gasket, breather body .....	1	1	1	2
43	4.8170	5124731	Pipe, breather extension (dev. L. 19.6") .....	1	1	1	
43	4.8170	5124732	Pipe, breather extension (dev. L. 18.7") .....	1	1	1	
43	4.8175	5121764	Hose, breather extension pipe (1 1/4" x 1 3/4") .....	1	1	1	
43	4.8175	3222740	Hose, breather extension pipe (1 1/2" x 2 1/4") .....	2	2	2	
43	4.8180	5189051	Clamp, hose (1 1/16"-2" range) .....	2	2	2	
43	4.8180	272861	Clamp, hose (1 7/8" dia.) .....	2	2	2	
<b>FRESH WATER PUMP</b>							
3,52	5.1001	5126877	Pump Assy., fresh water .....	1			
3,52	5.1001	5126965	Pump Assy., fresh water .....		1		
3,52	5.1001	5126967	Pump Assy., fresh water .....			1	
76	5.1001	5108449	Pump Assy., fresh water .....				1
76	5.1001	5108723	Pump Assy., fresh water (axial inlet) .....				1
48	5.1001	5117962	Ring, fresh water pump seal .....	1	1	1	
48	5.1001	179862	Bolt, 7/16"-14 x 1 1/2" hex. hd. ....	2	2	13	
48	5.1001	186292	Bolt, 7/16"-14 x 4 1/4" hex. hd. ....	1	1		
48	5.1001	190909	Bolt, 7/16"-14 x 5" hex. hd. ....			1	
48	5.1001	187425	Bolt, 7/16"-14 x 5 1/4" hex. hd. ....			1	
-	-	103342	Washer, 7/16" flat .....	1	1	1	
48	5.1001	103322	Lockwasher, 7/16" .....	3	3	3	
-	-	5128220	Gasket, fresh water pump (pump to flywheel housing) .....				1
48	5.1031	5117950	Cover, fresh water pump body .....	1	1		
48	5.1031	5117961	Cover, fresh water pump body .....			1	
-	-	5128223	Cover, fresh water pump body (with pump 5108449) .....				1
-	-	5108489	Cover, fresh water pump body (with pump 5108723) .....				1
-	-	5128221	Cover, fresh water pump drive gear .....				1
-	-	186625	Bolt, 5/16"-18 x 7/8" hex. hd. ....				6
-	-	179839	Bolt, 3/8"-16 x 1" hex. hd. ....				1
-	-	179867	Bolt, 7/16"-14 x 2 1/4" hex. hd. ....				1
-	-	186631	Bolt, 1/2"-13 x 2 1/4" hex. hd. ....				3
-	-	5150568	Washer, 7/16" copper .....				1
-	-	103320	Lockwasher, 5/16" .....				6
-	-	103321	Lockwasher, 3/8" .....				1
-	-	103323	Lockwasher, 1/2" .....				3
-	-	114981	Draincock, 1/8" (in cover) .....				1
48	5.1031	121917	Nut, 5/16"-24 hex. ....	5	5	4	
48	5.1032	5117975	Gasket, fresh water pump body cover .....	1	1		
48	5.1032	5117976	Gasket, fresh water pump body cover .....			1	
-	-	5128224	Gasket, fresh water pump body cover .....				1
-	-	5128222	Gasket, fresh water pump drive gear cover .....				1
48	5.1040	5117847	Stud, water pump body .....	5	5	4	
-	-	103196	Stud, 3/8"-16-24 x 1 9/16" .....				6
-	-	273368	Stud, 3/8"-16-24 x 5 1/4" .....				4
48	5.1050	5123150	Shaft, fresh water pump .....	1	1	1	
-	-	5108451	Shaft, fresh water pump .....				1
-	-	5115042	Spacer, fresh water pump bearing .....				1
48	5.1065	5117983	Seal, fresh water pump shaft bearing oil .....	1	1	1	
-	-	5128569	Seal, fresh water pump bearing oil .....				1
48	5.1070	903204	Bearing, fresh water pump (inner) .....	1	1	1	1
48	5.1070	903304	Bearing, fresh water pump (outer) .....	1	1	1	
48	5.1070	274746	Lockring, fresh water pump outer bearing .....	1	1	1	
-	-	9416358	Ring, fresh water pump bearing retaining .....				1
-	-	7451222	Race, fresh water pump end bearing inner (on shaft) .....				1
-	-	5108446	Washer, fresh water pump end bearing inner race .....				1
-	-	447174	Nut, fresh water pump end bearing inner rod .....				1



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5127921	Retainer, fresh water pump bearing and seal .....				1
-	-	103321	Lockwasher, 3/8" .....				6
-	-	117049	Nut, 3/8"-24 hex. ....				6
-	-	5108339	Support Assy., fresh water pump bearing (includes roller assy. and retaining ring) .....				1
-	-	7451223	Roller Assy., fresh water pump end bearing .....				1
-	-	9416358	Ring, fresh water pump end bearing roller assy. retaining .....				1
-	-	181360	Bolt, 3/8"-24 x 3/4" hex. hd. ....				2
-	-	116103	Washer, 3/8" copper .....				2
-	-	103321	Lockwasher, 3/8" .....				4
-	-	117049	Nut, 3/8"-24 hex. ....				4
-	-	5128224	Gasket, fresh water pump bearing support .....				1
-	-	5127922	Gasket, fresh water pump bearing and seal retainer .....				1
48	5.1120	5123622	Impeller, fresh water pump .....	1			
48	5.1120	5123183	Impeller, fresh water pump .....		1		
48	5.1120	5123185	Impeller, fresh water pump .....			1	
-	-	5126781	Impeller Assy., fresh water pump .....				1
-	-	120396	Washer, 1/2" flat .....				1
-	-	5128476	Nut, fresh water pump impeller(1/2"-20") .....				1
48	5.1120	120395	Washer, 7/16" plain .....	1	1	1	
48	5.1120	5117972	Nut, 7/16"-20 hex. lock .....	1	1	1	
48	5.1130	5121751	Seal Assy., fresh water pump .....	1	1	1	
-	-	5196787	Seal Assy., fresh water pump .....				1
48	5.1130	5126840	Gear, fresh water pump drive .....	1	1	1	
-	-	5126780	Gear, fresh water pump drive .....				1
-	-	106749	Key, 1/8" x 1/2" woodruff .....				1

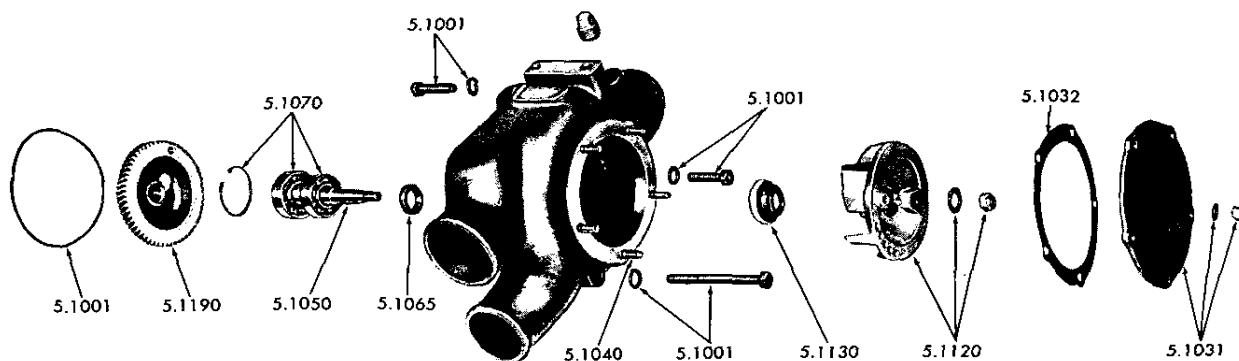


Fig. 48 - Fresh Water Pump

WATER OUTLET MANIFOLD							
52	5.2001	5124422	Manifold, water outlet .....			2	
-	-	5126377	Manifold, water outlet (front) .....				2
76	5.2001	5167488	Manifold, water outlet (rear) .....				2
-	-	103321	Lockwasher, 3/8" .....			24	32
52,75	5.2001	117049	Nut, 3/8"-24 hex. ....			24	32
-	-	5150361	Gasket, water outlet manifold .....			12	16
6	5.2020	5150362	Stud, water outlet manifold .....			24	32
-	-	5122439	Seal, water outlet manifold (at thermostat housing) .....			2	2
-	-	5156770	Seal, water outlet manifold (front and rear manifold) .....				2
-	-	5188036	Clamp, water outlet manifold seal (with 5122439) .....			2	2
-	-	111628	Clamp, 2 3/4" dia. hose (with 5156770) .....				2



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
THERMOSTAT							
49,50	5.2050	5118264	Thermostat Assy. ....	2	2	4	4
49,50	5.2060	5118265	Seal, thermostat .....	2	2	4	4
-	-	5179232	Ring, thermostat vent retainer "0" .....			2	
-	-	5122612	Retainer, thermostat housing vent seal .....			1	
43,63	5.2090	5117997	Housing, thermostat (right bank) .....	1	1		
44	5.2090	5117546	Housing, thermostat (left bank) .....	1	1		
49,52	5.2090	5122628	Housing Assy., thermostat (right bank) .....			1	
33,50	5.2090	5122377	Housing Assy., thermostat (left bank) .....			1	
-	-	5127692	Housing, thermostat (left bank) .....				1
76	5.2090	5108652	Housing, thermostat (right bank) .....				1
49,50	5.2090	179839	Bolt, 3/8"-16 x 1" hex. hd. ....	2	2	2	2
49,50	5.2090	186612	Bolt, 3/8"-16 x 1 1/8" hex. hd. ....			2	
49,50	5.2090	186628	Bolt, 3/8"-16 x 1 1/4" hex. hd. ....	2	2		
49,50	5.2090	191249	Bolt, 3/8"-16 x 3 3/4" hex. hd. ....	1	1		
49,50	5.2090	186285	Bolt, 3/8"-16 x 4" hex. hd. ....	1	1		
-	-	179859	Bolt, 7/16"-14 x 1 1/8" hex. hd. ....			2	
-	-	103341	Washer, 3/8" flat .....	2	2	2	
-	-	116103	Washer, 3/8" copper .....	4	4	2	2
-	-	5150568	Washer, 7/16" copper .....			2	2
49,50	5.2090	103321	Lockwasher, 3/8" .....	6	6	2	
-	-	103322	Lockwasher, 7/16" .....			2	
-	-	103647	Draincock, 1/4" .....			1	1
49	5.2110	5117993	Gasket, thermostat housing (right bank) .....	1	1		
-	-	5123716	Gasket, thermostat housing (left bank) .....			1	
50	5.2110	5117438	Gasket, thermostat housing (left bank) .....	1	1		
-	-	5123715	Gasket, thermostat housing (right bank) .....			1	
49	5.2120	5128442	Cover, thermostat housing (left bank) (with instrument panel with vertical lever throttle adjustment)	1	1		
50	5.2120	5124021	Cover, thermostat housing (left bank) (with instrument panel with rotary throttle adjustment)	1	1		
49	5.2120	5124022	Cover, thermostat housing (right bank)	1	1		
-	-	5122625	Cover, thermostat housing (right bank)			1	
52	5.2120	5122626	Cover, thermostat housing (left bank) (with instrument panel with rotary throttle adjustment)			1	
52	5.2120	5128445	Cover, thermostat housing (left bank) (with instrument panel with vertical lever throttle adjustment)			1	
-	-	5129954	Cover Assy. thermostat (left bank)				1
-	-	5129946	Cover Assy., thermostat (right bank)				1
49,50	5.2120	444687	Plug, 1/8" pipe .....	2	2	2	
49,50	5.2120	186282	Bolt, 3/8"-16 x 3 1/4" hex. hd. ....	8	8	12	
49,50	5.2120	103321	Lockwasher, 3/8" .....	8	8	12	12
-	-	5122459	Elbow, thermostat housing cover outlet (left bank, keel cooling) .....	1	1		
-	-	5122410	Elbow, thermostat housing cover outlet (right bank, keel cooling) .....	1	1		
-	-	5122410	Elbow, thermostat housing cover outlet (heat exchanger cooling) .....	2	2		
33,52	5.2122	5122420	Elbow, thermostat housing cover outlet (keel cooling) .....			1	
33,52	5.2122	5122423	Elbow, thermostat housing cover outlet (keel cooling) .....			1	
33,52	5.2122	5122423	Elbow, thermostat housing cover outlet (heat exchanger cooling) .....			2	
-	-	5129911	Elbow, thermostat housing cover outlet (right bank, keel cooling) .....				1
-	-	5129857	Elbow, thermostat housing cover outlet (left bank, keel cooling) .....				1

(includes  
thermostat  
seal).....



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
75	5.2122	5129857	Elbow, thermostat housing cover outlet (heat exchanger cooling) ..				2
-	-	5127299	Hose, thermostat housing cover outlet elbow (2 1/4" I.D. x 2.24"L.) .....	4	4		
33,52	5.2124	5123708	Hose, thermostat housing cover to pump (2 1/4" I.D. x 2 1/4"L.) .....			1	
75	5.2124	5164007	Hose, thermostat housing to water pump (2 3/8" I.D. x 2 1/8"L.) .....	1	1		
33,52	5.2124	5177273	Hose, thermostat housing cover outlet elbow (2 1/2" I.D. x 2 1/4"L.) .....			4	
75	5.2124	5119659	Hose, thermostat housing to water pump (3 1/2" I.D. x 2.76"L.)....				1
-	-	5184345	Hose, thermostat housing cover outlet elbow (3" I.D. x 2 1/2"L.) .....				4
33,52	5.2124	9139809	Clamp, hose (2 1/16"-3" dia.) .....	8	8	8	
33,52	5.2124	5188036	Clamp, hose (2 9/16"-3 1/2" dia.) .....			2	
75	5.2124	9139813	Clamp, thermostat housing cover outlet elbow hose (4" dia.) .....				2
-	-	5122503	Manifold, heat exchanger water (between outlet elbows) (keel cooling) .....	1	1		
75	5.2126	5122504	Manifold, heat exchanger water (between outlet elbows) (heat exchanger cooling) .....	1	1		
-	-	5122457	Manifold, heat exchanger water (between outlet elbows) (keel cooling) .....			1	

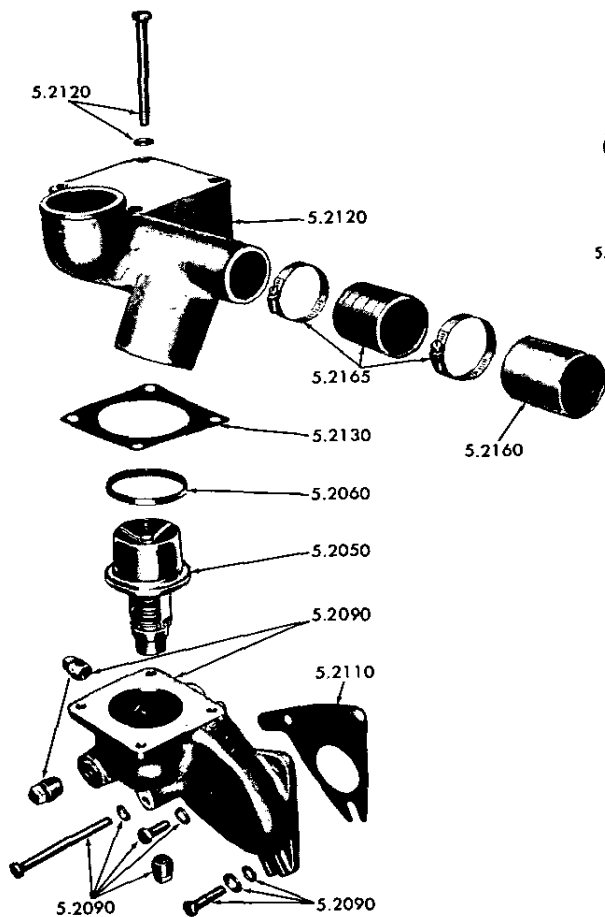


Fig. 49 - Thermostat Housing (Right Bank)

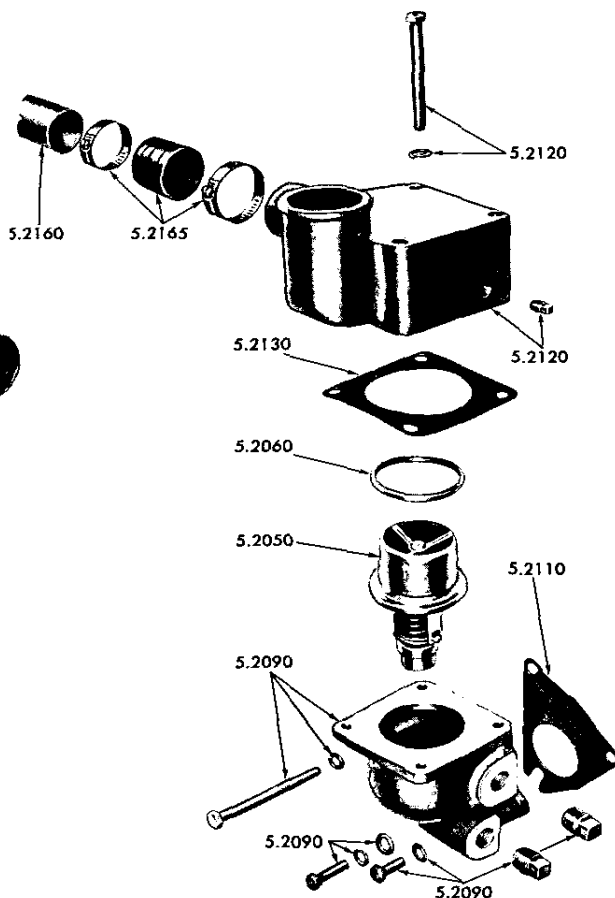


Fig. 50 - Thermostat Housing (Left Bank)



# G M D I E S E L

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
75	5.2126	5122458	Manifold, heat exchanger water (between outlet elbows) (heat exchanger cooling) .....			1	
75	5.2126	5129720	Manifold, heat exchanger water (heat exchanger cooling) .....				1
-	-	5129864	Manifold, heat exchanger water (cooling) .....				1
-	-	186622	Bolt, 3/8"-16 x 1 1/4" hex. hd. ....	4	4	6	6
-	-	103321	Lockwasher, 3/8" .....	4	4	6	6
-	-	5124029	Gasket, heat exchanger water manifold .....	1	1		
-	-	5122454	Gasket, heat exchanger water manifold .....			3	3
49,50	5.2130	5117786	Gasket, thermostat housing cover .....	2	2		
49,50	5.2130	5175989	Gasket, thermostat housing cover .....			2	2
<b>WATER BY-PASS TUBE</b>							
49,50	5.2160	5117989	Tube, water by-pass (13 1/8"L.) (industrial) .....	1	1		
49,50	5.2160	5122424	Tube, water by-pass (13 3/8"L.) (marine) .....	1	1		
49,50	5.2160	5122398	Tube, water by-pass (16 5/8"L.) (marine) .....			1	
49,50	5.2160	5122440	Tube, water by-pass (16 5/8"L.) (industrial) .....			1	
76	5.2160	5127633	Tube, water by-pass (18"L.) .....				1
49,50	5.2165	3222709	Hose, water by-pass tube (1 3/4" I.D. x 2 3/4"L.) .....	2	2		
49,50	5.2165	5117994	Hose, water by-pass tube (1 3/4" I.D. x 2") .....	2	2		
49,50	5.2165	5173450	Hose, water by-pass tube (2" I.D. x 2 1/2"L.) .....			2	
49,50	5.2165	5177273	Hose, water by-pass tube (2.5" I.D. x 2.25"L.) .....				2
49,50	5.2165	5186841	Clamp, hose (1 9/16"-2 1/2") .....	4	4	4	
49,50	5.2165	9139809	Clamp, hose (2 1/16"-3") .....				4
<b>RADIATOR</b>							
62	5.3001	5124340	Radiator Assy. (used on torque converter units) .....	1			
62	5.3001	5126568	Radiator Assy. (used on power take-off units) .....	1			
62	5.3001	5123784	Radiator Assy. (used on torque converter units) .....		1		
62	5.3001	5125285	Radiator Assy. (used on power take-off units) .....		1		
62	5.3001	5124077	Radiator Assy. (used on power take-off units) .....			1	
62	5.3001	5123783	Radiator Assy. (used on torque converter units) .....			1	1
-	-	148344	Draincock, 1/4" (in radiator) .....	1			
-	-	3116561	Draincock, 3/8" (in radiator) .....		1	1	1
-	-	5168520	Washer, 5/8" bevel .....		4		
62	5.3001	186629	Bolt, 5/16"-18 x 1" hex. hd. ....	10			
62	5.3001	271585	Bolt, 5/8"-18 x 1 3/4" hex. hd. ....			4	4
62	5.3001	271562	Bolt, 5/8"-18 x 2" hex. hd. ....		4		
-	-	5124634	Shell Assy., radiator .....	1			
-	-	5167615	Washer, 7/16" bevel .....	4			2
-	-	181670	Bolt, 7/16"-20 x 1 1/2" hex. hd. ....	4			
-	-	103342	Washer, 7/16" flat .....	4			
-	-	103322	Lockwasher, 7/16" .....	4			
-	-	117050	Nut, 7/16"-20 hex. ....	4			
-	-	5196582	Tank, radiator lower .....		1		
-	-	5192391	Gasket, radiator tank .....		6		
-	-	186625	Bolt, 5/16"-18 x 7/8" hex. hd. ....		46		
-	-	103320	Lockwasher, 5/16" .....		46		
-	-	123197	Nut, 5/16"-18 hex. ....		46		
-	-	5195472	Cap, radiator filler .....		1		
-	-	850802	Cap, radiator filler .....			1	
-	-	846732	Gasket, radiator filler cap .....		1		
<b>WATER CONNECTIONS (Non-Radiator Units)</b>							
-	-	5122478	Elbow, expansion tank outlet .....	1	1		
52	5.3311	5122414	Elbow, expansion tank outlet .....			1	
-	-	5108486	Elbow, expansion tank outlet .....				1



# G M DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
52	5.3311	186619	Bolt, 3/8"-16 x 1 1/8" hex. hd. ....			4	
-	-	186622	Bolt, 3/8"-16 x 1 1/4" hex. hd. ....	2	2		4
-	-	179849	Bolt, 3/8"-16 x 2 1/2" hex. hd. ....	2	2		
-	-	103321	Lockwasher, 3/8" .....	4	4	4	4
-	-	118536	Draincock, 3/8" .....	1	1	1	
-	-	5167762	Gasket, expansion tank outlet elbow .....	1	1		
-	-	5122975	Gasket, expansion tank outlet elbow .....			1	1
52	5.3331	5123708	Hose, expansion tank outlet (2 3/4" I.D. x 2 1/4" L.) .....	2	2		
75	5.3331	5119659	Hose, expansion tank outlet (3 1/2" I.D. x 2 3/4" L.) .....			1	1
52	5.3331	5188036	Clamp, hose (2 9/16"-3 1/2" dia.) .....	2	2	2	
75	5.3331	9139813	Clamp, hose (4" dia.) .....			2	2
-	-	5127041	Connector, 25° exhaust manifold fresh water inlet (3/4" pipe x 1") .....	2	2	2	
-	-	5122663	Elbow, exhaust manifold fresh water inlet (3/4" pipe x 1") .....	2	2	2	2
-	-	103647	Draincock, 1/4" .....	2	2	2	2
-	-	5175681	Hose, exhaust manifold fresh water inlet (1" I.D. x 6 1/4" L.) .....	2	2		
-	-	5178419	Hose, exhaust manifold fresh water inlet (1" I.D. x 6 1/2" L.) .....			2	3
-	-	5114449	Hose, exhaust manifold fresh water inlet (1" I.D. x 5" L.) .....				1
-	-	5186840	Clamp, hose (13/16"-1 1/2" dia.) .....	4	4	4	8
-	-	5122651	Tube Assy., exhaust manifold fresh water outlet (LH) .....	1	1		
-	-	5122653	Tube Assy., exhaust manifold fresh water outlet (RH) .....	1	1		
33	5.3440	5122642	Tube Assy., exhaust manifold fresh water outlet (LH) .....			1	
33	5.3440	5122643	Tube Assy., exhaust manifold fresh water outlet (RH) .....			1	
-	-	5127041	Connector, 25° exhaust manifold fresh water outlet to thermostat housing (3/4" pipe x 1") .....	1	1		2
33	5.3440	5181801	Connector, exhaust manifold fresh water outlet to thermostat housing (3/4" pipe x 1") .....	1	1	2	10
-	-	5118823	Nipple, 3/4" x 1/2" red. pipe .....				2
-	-	140798	Elbow, 3/4" street 45° .....				2
-	-	5163867	Stud (5/16"-18 x 1 5/16") .....	4		4	
-	-	5163834	Washer, 5/16" plain brass .....	4	4	4	
-	-	123197	Nut, 5/16"-18 hex. ....	4	4	4	
-	-	5156319	Gasket, exhaust manifold fresh water outlet elbow .....	2	2	2	
4,33	5.3442	5156170	Hose, exhaust manifold fresh water outlet (1" I.D. x 2 1/2") .....	1	1	2	
75	5.3442	5114449	Hose, exhaust manifold fresh water outlet (1" I.D. x 5" L.) .....				1
-	-	5125722	Hose, exhaust manifold fresh outlet (1" I.D. x 7 1/2" L.) .....				3
-	-	5186840	Clamp, hose (13/16"-1 1/2" dia.) .....	4	4	4	8
<b>WATER CONNECTIONS (Radiator Units)</b>							
29	5.3270	5124600	Tube, radiator inlet .....	2			
29,62	5.3270	5123702	Tube, radiator inlet .....		2		
29,62	5.3270	5124148	Tube, radiator inlet .....			2	
29	5.3270	5172508	Connection, radiator inlet .....		2		
29	5.3270	5124150	Connection, radiator inlet .....			2	
-	-	5163760	Gasket, radiator inlet connection .....		2		
-	-	5124151	Gasket, radiator inlet connection .....			2	
-	-	5123708	Hose, radiator inlet connection (2 3/4" I.D. x 2.24" L.) .....	2	2		
-	-	5157605	Hose, radiator inlet connection (2 1/4" I.D. x 3.32" L.) .....	4	4		
-	-	5129094	Hose, radiator inlet connection (2 1/2" I.D. x 3.25" L.) .....			4	
-	-	9139809	Clamp, radiator inlet hose (2 1/16"-3" hose) .....	8	8	8	
-	-	5188036	Clamp, radiator inlet hose (2 9/16"-3 1/2" hose) .....	4	4		
43	5.3310	5123701	Connection, radiator outlet (water pump inlet) .....		1		
-	-	5187890	Connection, radiator outlet .....		1		
-	-	5124155	Connection, radiator outlet .....			1	
-	-	5176676	Gasket, radiator outlet connection .....		1		
-	-	5124164	Gasket, radiator outlet connection .....			1	
-	-	5125854	Tube, water pump inlet .....	1			



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
			<b>FAN</b>				
			The proper fan blade, mounting support, bracket, pulley, cap and spacer for your engine can be interpreted by your GM Diesel dealer or distributor. Furnish him with the model number and type number shown on the Option Plate on your engine.				
3,52	5.4010	-	Blade, fan .....	1	1	1	1
51	5.4010	121917	Nut, 5/16" hex. ....	6	6	6	
51	5.4025	-	Support, fan mounting .....	1	1	1	1
51	5.4025	186725	Bolt, 1/2"-13 x 1 1/2" hex. hd. ....	2	2	2	
51	5.4025	215722	Bolt, 1/2"-13 x 5 3/4" hex. hd. ....	1	1	1	
51	5.4025	433483	Bolt, 5/8"-11 x 5" hex. hd. ....	2	2	2	
-	-	103343	Washer, 1/2" plain .....	2	2	2	
-	-	103323	Lockwasher, 1/2" .....	1	1	1	
-	-	103345	Lockwasher, 5/8" .....	2	2	2	
51	5.4090	-	Bracket Assy., fan (includes shaft and snap ring) .....	1	1	1	1
51	5.4090	186725	Bolt, 1/2"-13 x 1 1/2" hex. hd. ....	4	4	4	4
51	5.4090	103343	Washer, 1/2" plain .....	4	4	4	4
51	5.4090	103323	Lockwasher, 1/2" .....	4	4	4	4
51	5.4100	122797	Nut, 5/8"-18 hex. ....	1	1	1	1
51	5.4100	103385	Pin, 1/8" x 1 1/4" cotter .....	1	1	1	1
51	5.4110	905259	Bearing, fan shaft (rear) .....	1	1	1	1
51	5.4110	905260	Bearing, fan shaft (front) .....	1	1	1	1

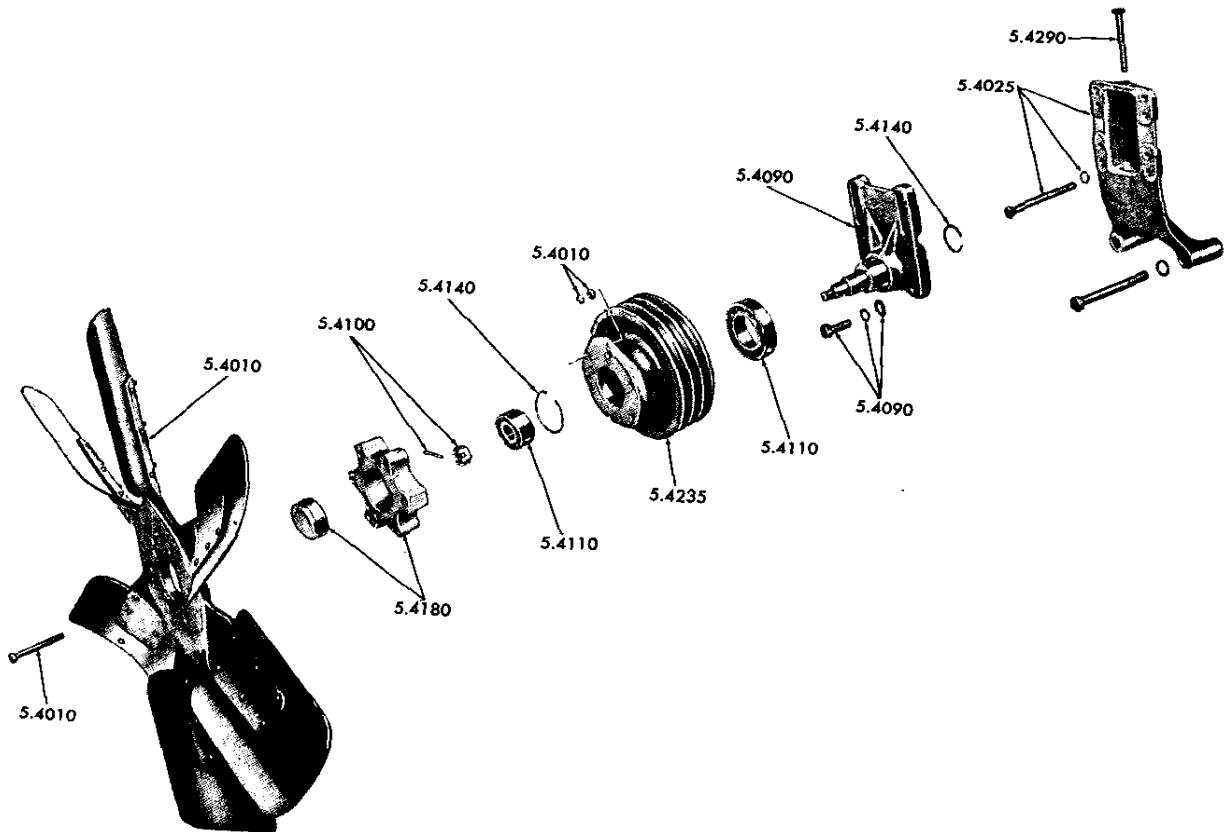


Fig. 51 - Fan



# G M D I E S E L

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
51	5.4140	5188194	Ring, fan shaft bearing snap (external - rear) .....	1	1	1	1
51	5.4140	274746	Ring, fan shaft bearing snap (internal - front) .....	1	1	1	1
51	5.4180	-	Cap, fan hub .....	1	1	1	1
51	5.4180	-	Cap and Spacer Assy. ....	1	1	1	1
51	5.4235	-	Pulley, fan .....	1	1	1	1
51	5.4290	5122282	Bolt, fan bracket adjusting (1/2"-13 x 3 1/2") .....	1	1	1	1
51	5.4290	5124203	Bolt, fan bracket adjusting (1/2"-13 x 5") .....		1	1	1
<b>FAN SHROUD</b>							
62	5.4560	5196583	Shroud, fan		1		
-	-	5194058	Clip, fan shroud		4		
-	-	113954	Screw, 1/4"-20 x 3/8" rd. hd. sl.		8		
62	5.4580	5124609	Guard Assy., fan	1			
62	5.4580	5123804	Guard Assy., fan		1		
62	5.4580	5124143	Guard Assy., fan			1	1
-	-	179816	Bolt, 5/16"-18 x 3/4" hex. hd.	8			
-	-	181596	Bolt, 5/16"-24 x 7/8" hex. hd.				8
-	-	181360	Bolt, 3/8"-24 x 3/4" hex. hd.		8	8	
-	-	103341	Washer, 3/8" flat		8	8	8
-	-	103320	Lockwasher, 5/16"	8			8
-	-	103321	Lockwasher, 3/8"		8	8	
<b>HEAT EXCHANGER</b>							
33,52	5.5001	5119720	Tank Assy., expansion	1	1		
33,52	5.5001	5117764	Tank Assy., expansion			1	
-	-	5162663	Tank Assy., expansion				1
-	-	5117186	Plug (2" cup)			2	2
-	-	5111798	Plug, 1" pipe	1	1		
-	-	103877	Plug, 1/8" pipe			1	1
-	-	148344	Valve Assy., 1/4"	1	1		
-	-	8509553	Core, heat exchanger	1	1		
-	-	5108899	Core, heat exchanger			1	1
33,52	5.5010	8515850	Electrode Assy., heat exchanger (3 3/8" electrode)	1	1	1	1
33,52	5.5010	8517479	Electrode Assy., heat exchanger (2 1/8" electrode)	1	1	1	
-	-	5117674	Cover, expansion tank (inlet)	1	1		
-	-	5117442	Cover, expansion tank (inlet)			1	
-	-	5122950	Cover, expansion tank (inlet)				1
-	-	5117440	Cover, expansion tank (blank)			1	1
-	-	5186976	Cover, expansion tank (blank)	1	1		
-	-	179816	Bolt, 5/16"-18 x 3/4" hex. hd.			28	28
-	-	179819	Bolt, 5/16"-18 x 1 1/4" hex. hd.	20	20		
-	-	5188862	Cover, expansion tank (oil cooler cavity)	1	1		
-	-	103320	Lockwasher, 5/16"	AR	AR	AR	AR
-	-	5167764	Gasket, expansion tank cover	2	2		
-	-	5117406	Gasket, expansion tank cover			3	3
-	-	5167766	Retainer, heat exchanger seal	1	1		
-	-	5117339	Retainer, heat exchanger seal			1	1
-	-	5119660	Seal, heat exchanger			2	1
-	-	5167746	Seal, heat exchanger	2	2		
-	-	5117334	Gland, heat exchanger seal retainer			1	1
-	-	5167745	Gland, heat exchanger seal retainer	1	1		
-	-	186629	Bolt, 5/16"-18 x 1" hex. hd.			14	14
-	-	103320	Lockwasher, 5/16"			14	14
-	-	5167741	Cover, heat exchanger (outlet)	1	1		
33	5.5030	5167768	Cover, heat exchanger (inlet)	1	1		
33	5.5030	5122634	Cover, heat exchanger (inlet)			1	
-	-	5108819	Cover, heat exchanger (inlet)				1
-	-	103647	Draincock, 1/4" (heat exchanger inlet)				1
-	-	113177	Plug, 3/4" brass pipe	1	1		
-	-	186629	Bolt, 5/16-18 x 1" hex. hd.			28	14
-	-	186624	Bolt, 5/16-18 x 1 1/4" hex. hd.	10	10		



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	186643	Bolt, 5/16"-18 x 2 1/16" hex. hd. ....	10	10		
-	-	103320	Lockwasher, 5/16".....	AR	AR	AR	AR
-	-	5167764	Gasket, heat exchanger cover .....	3	3		
-	-	5117406	Gasket, heat exchanger cover .....			3	
-	-	5122425	Bracket, expansion tank mounting (upper).....	1	1		
-	-	5122412	Bracket, expansion tank mounting (upper).....			1	
-	-	5122456	Bracket, expansion tank mounting (lower).....	1	1		
-	-	5125983	Bracket, expansion tank mounting (lower).....			1	
-	-	5125720	Stud, 1/2"-13-20 x 1 15/16" .....			2	
-	-	186612	Bolt, 3/8"-16 x 1 3/8" hex. hd. ....	2	2		
-	-	179891	Bolt, 1/2"-13 x 2" hex. hd. ....			2	
-	-	179893	Bolt, 1/2"-13 x 3" hex. hd. ....	2	2		
-	-	100168	Bolt, 1/2"-13 x 5" hex. hd. ....	1	1	1	
-	-	271563	Bolt, 5/8"-11 x 2 1/4" hex. hd. ....	1	1	1	
-	-	271570	Bolt, 5/8"-11 x 4" hex. hd. ....			2	
-	-	428720	Bolt, 5/8"-11 x 4 1/2" hex. hd. ....	2	2		
-	-	103321	Lockwasher, 3/8" .....	2	2		
-	-	103323	Lockwasher, 1/2" .....	3	3	5	
-	-	103325	Lockwasher, 5/8" .....	3	3	3	
-	-	5118060	Neck, expansion tank filler .....	1	1	1	1
-	-	5118061	Gasket, expansion tank filler neck .....	1	1	1	1
33,52	5.5140	850795	Cap, expansion tank .....	1	1	1	1
33	5.5190	5125757	Tube Assy., expansion tank overflow .....	1	1		
33	5.5190	5158825	Tube Assy., expansion tank overflow .....			1	1
-	-	143343	Elbow, 5/16" inv. fl. tube 90° .....	1	1		
-	-	137422	Elbow, 5/16" inv. fl. tube 90° .....			1	1
4,53	5.5377	5123361	Elbow, raw water pump inlet .....	1	1	1	
-	-	5119645	Elbow, raw water pump inlet.....				1
-	-	8515850	Electrode Assy., raw water pump inlet .....				1
-	-	179838	Bolt, 3/8"-16 x 7/8" hex. hd. ....	2	2	2	2
-	-	103321	Lockwasher, 3/8" .....	2	2	2	2
-	-	5115395	Gasket, water flange at raw water pump .....	2	2	2	

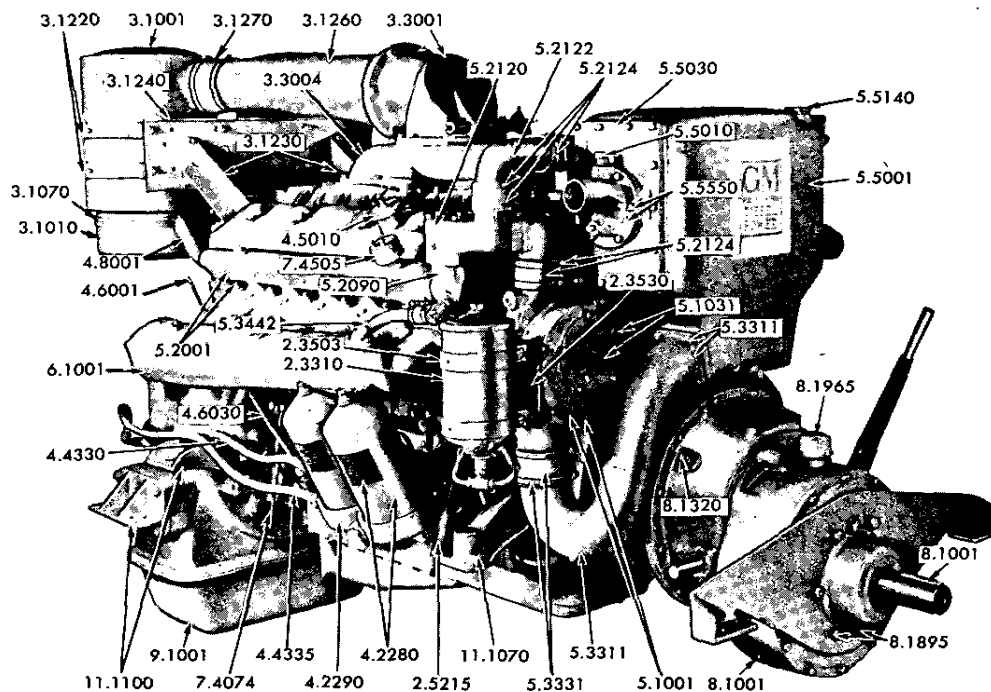


Fig. 52 - Heat Exchanger Cooling



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	5.5378	5112143	Gasket, raw water pump flange .....				2
4,53	5.5380	5122658	Tube Assy., raw water pump outlet .....	1	1		
33	5.5380	5122686	Tube Assy., raw water pump outlet .....			1	
-	-	5124071	Tube Assy., raw water pump outlet .....				1
-	-	190911	Bolt, 3/8"-16 x 2 7/8" hex. hd. ....				2
-	-	103321	Lockwasher, 3/8" .....				2
-	-	179838	Bolt, 3/8"-16 x 7/8" hex. hd. ....	2	2	2	
-	-	103321	Lockwasher, 3/8" .....	2	2	2	2
33	5.5380	5118351	Clip, 2" dia. ....			1	
4	5.5430	5122618	Tube, heat exchanger inlet (21 15/32"L.) .....	1			
4	5.5430	5122617	Tube, heat exchanger inlet (27 7/64"L.) .....		1		
-	-	5125803	Tube, heat exchanger inlet (33 1/2"L.) .....			1	
-	-	5129952	Tube, heat exchanger inlet .....				1
4	5.5440	5122659	Tube Assy., heat exchanger water inlet .....	1	1		
-	-	5119878	Flange, heat exchanger water inlet .....	1	1		
-	-	186629	Bolt, 5/16"-18 x 1" hex. hd. ....	4	4		
-	-	103320	Lockwasher, 5/16" .....	4	4		
4	5.5470	5173450	Hose, heat exchanger water inlet tube (2" I.D. x 2 1/2" L.) .....	2	2		
33	5.5470	5163815	Hose, heat exchanger water inlet tube (2" I.D. x 4 1/2" L.) .....			1	
-	-	5177221	Hose, heat exchanger water inlet .....				2
4	5.5470	5186841	Clamp, 2 1/2" dia. hose .....	4	4	2	
-	-	5188036	Clamp, hose (2 9/16"-3 1/2" dia.) .....				4
-	-	5119878	Flange, heat exchanger water outlet .....	1	1		
52	5.5550	5123741	Flange, heat exchanger water outlet .....			1	
-	-	5117348	Flange, heat exchanger water outlet .....				1
-	-	8515850	Electrode Assy., heat exchanger .....				1
-	-	186629	Bolt, 5/16"-18 x 1" hex. hd. ....			6	6
-	-	103320	Lockwasher, 5/16" .....			6	6
-	-	5158747	Gasket, heat exchanger water outlet tube .....	1	1		
<b>RAW WATER PUMP</b>							
4,53,54	5.6001	5115396	Pump Assy., raw water } (includes indented items) .....	1			
54	5.6001	5122599	Pump Assy., raw water }		1	1	1
-	-	179860	Bolt, 7/16"-14 x 1 1/4" hex. hd. ....	1	1	1	1

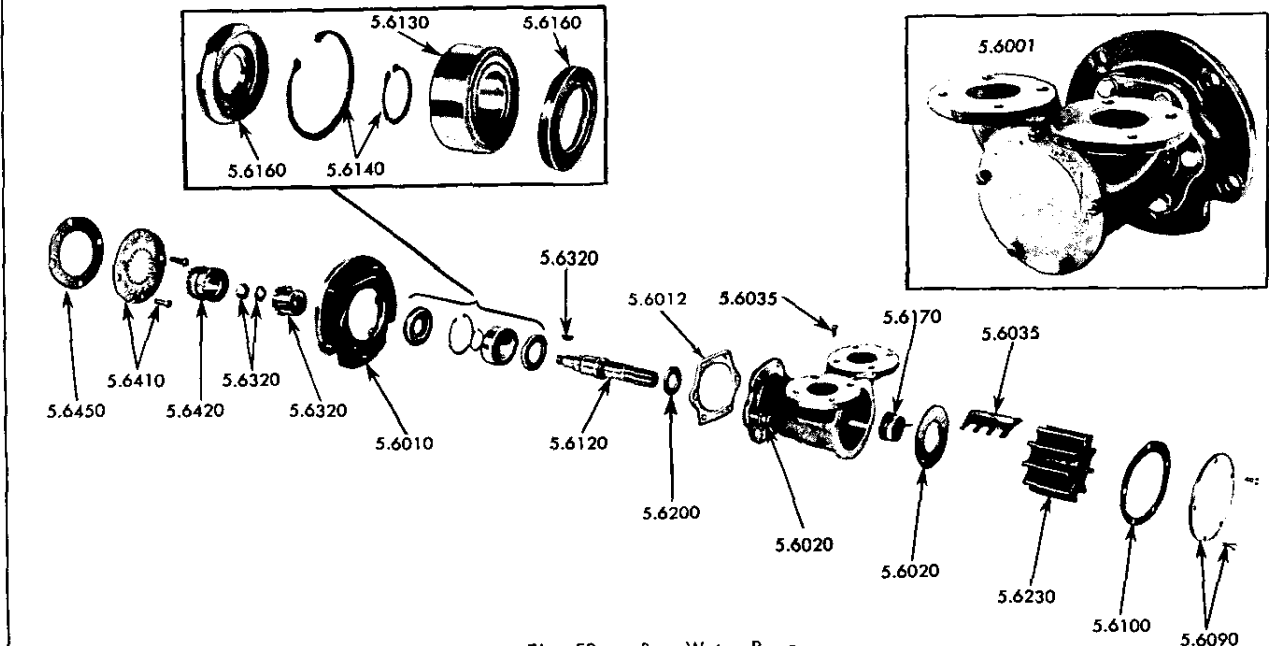


Fig. 53 - Raw Water Pump



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	179882	Bolt, 1/2"-13 x 1 1/8" hex. hd. ....	4	4	4	
-	-	179884	Bolt, 1/2"-13 x 1 3/8" hex. hd. ....				4
54	5.6010	5193551	Adaptor, raw water pump drive ....	1	1	1	1
54	5.6012	5194567	Gasket, raw water pump adaptor ....	1	1	1	1
54	5.6020	5193556	Plate, raw water pump wear ....	1	1	1	1
-	-	141343	Pin, 3/16" x 5/16" dowel ....	1	1	1	1
54	5.6020	120233	Bolt, 3/8"-16 x 1" hex. hd. ....	6	6	6	6
-	-	120382	Lockwasher, 3/8" ....	6	6	6	6
54	5.6035	5193554	Cam, raw water pump body offset ....	1			
54	5.6035	5196167	Cam, raw water pump body offset ....		1	1	1
54	5.6035	114366	Screw, 1/4"-20 x 1/2" fil. hd. ....	1	1	1	1
54	5.6090	5193555	Cover, raw water pump end ....	1	1	1	1
54	5.6090	114366	Screw, 1/4"-20 x 1/2" fil. hd. ....	5	5	5	5
54	5.6100	5193562	Gasket, raw water pump cover ....	1	1	1	1
54	5.6120	5193552	Shaft, raw water pump ....	1			
54	5.6120	5196169	Shaft, raw water pump ....		1	1	1
54	5.6130	954799	Bearing, raw water pump ....	1			
54	5.6130	907295	Bearing, raw water pump ....		1	1	1
54	5.6140	5193569	Ring, raw water pump bearing retainer (small) ....	1			
54	5.6140	5179222	Ring, raw water pump bearing retainer (large) ....	1			
54	5.6140	5196171	Ring, raw water pump bearing retainer ....		1	1	1
54	5.6160	5195020	Seal, raw water pump bearing (1 1/16" I.D.) ....	1			
54	5.6160	5195101	Seal, raw water pump bearing (1 11/32" I.D.) ....	1	1	1	1
54	5.6170	5193557	Seal Assy., raw water pump shaft ....	1	1	1	1
54	5.6200	5193676	Slinger, raw water pump shaft ....	1	1	1	1
-	-	5194860	Replacement Kit, seal and impeller (includes seal assy., impeller, cover gasket and cover screw) ....	AR			
-	-	5196846	Replacement Kit, seal and impeller (includes seal assy., impeller, cover gasket and cover screw) ....		AR	AR	AR
54	5.6230	5193553	Impeller, raw water pump ....	1			
54	5.6230	5196168	Impeller, raw water pump ....		1	1	1
54	5.6320	5161021	Gear, raw water pump drive ....	1			
54	5.6320	5196170	Gear, raw water pump drive ....		1	1	1
54	5.6320	103325	Lockwasher, 5/8" ....	1	1	1	1
54	5.6320	122366	Nut, 5/8" hex. ....	1	1	1	1

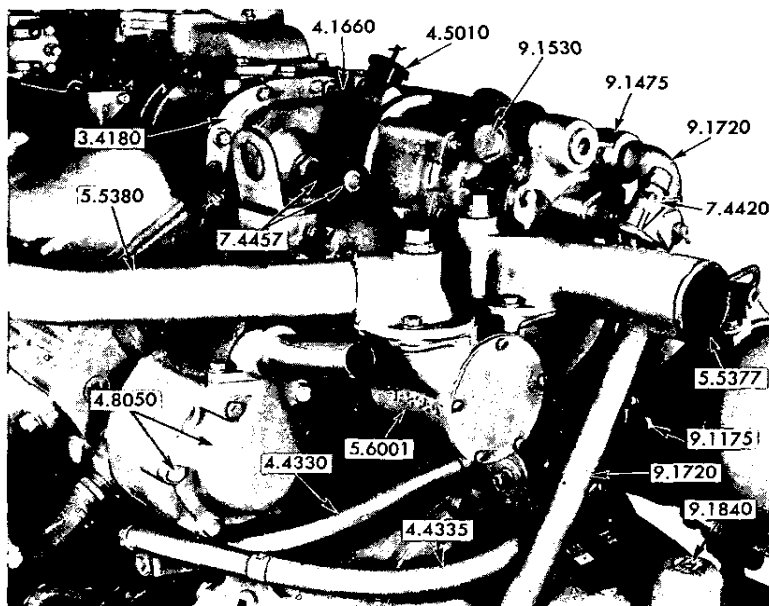


Fig. 54 - Raw Water Pump



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
54	5.6410	5153449	Plate, raw water pump drive .....	1	1	1	1
54	5.6410	5176474	Bolt, raw water pump drive plate .....	4	4	4	4
54	5.6420	3292492	Coupling, raw water pump drive .....	1	1	1	1
54	5.6450	5177026	Spacer, raw water pump drive .....	1	1	1	1
<b>WATER FILTER</b>							
-	-	5188110	Filter Assy., water (30 gallon } capacity system) (includes indented items) .....	1	1	1	
-	-	5118208	Filter Assy., water (65 gallon } capacity system) .....	1	1	1	1
-	-	1595836	Valve, water filter shut-off (1/2"-20 int. thd. connection) .....	1	1	1	1
-	-	3116561	Valve, water filter shut-off (5/8" I.D. hose connection) .....	1	1	1	1
-	-	186629	Bolt, 5/16"-18 x 1" hex. hd. ....	AR	AR	AR	AR
-	-	103320	Lockwasher, 5/16" .....	AR	AR	AR	AR
-	-	5194598	Installation Kit (includes filter assy., and all parts applicable to installation except bracket) .....	1	1	1	
55	5.7020	5194589	Element and Gasket Package, water filter .....	1	1	1	1
55	5.7045	2315428	Plate, water filter lower .....	1	1	1	1
-	-	5113396	Hose, water pump to water filter (5/8" x 30 1/2") .....	1	1	1	1
-	-	9139801	Clamp (9/16" I.D.) .....	2	2	2	2
-	-	190367	Elbow, 1/4"-90° street .....	1	1	1	1
-	-	3133153	Connector, hose .....	1	1	1	1
-	-	121207	Nipple, 3/8" pipe .....	1	1	1	1
-	-	120280	Tee, 3/8" pipe .....	1	1	1	1
-	-	5189469	Hose, water filter outlet .....	1	1	1	1
-	-	5189294	Fitting, 1/4" hose (inv. fl. tube) .....	1	1	1	1
-	-	116524	Bushing, 1/2" x 1/4" red. pipe .....	1	1	1	1
-	-	116332	Bushing, 3/8" x 1/4" red. pipe .....	1	1	1	1
-	-	5189292	Fitting, hose (1/4" P.T.) .....	1	1	1	1

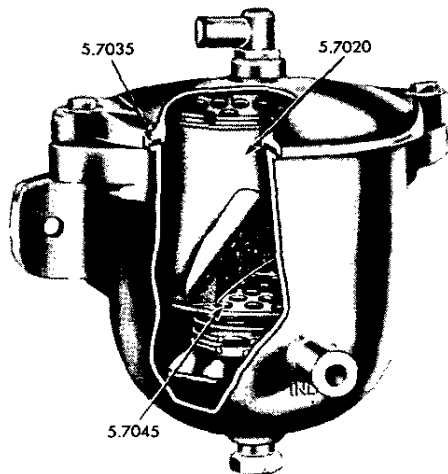


Fig. 55 - Water Filter

<b>EXHAUST MANIFOLD</b>							
-	-	5124437	Manifold, exhaust (center outlet, dry, right bank) (with shutdown).	1			
-	-	5124438	Manifold, exhaust (center outlet, dry, left bank) (without shutdown)	1			
-	-	5167184	Manifold, exhaust (center outlet, dry) .....			2	
56	6.1001	5126512	Manifold, exhaust (end outlet, dry, right bank) (with shutdown)....		1		
56	6.1001	5126513	Manifold, exhaust (end outlet, dry, right bank) (without shutdown)		1		
56	6.1001	5126515	Manifold, exhaust (end outlet, dry, left bank) (without shutdown) ..		1		



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
56	6.1001	5124638	Manifold, exhaust (end outlet, dry, right bank) (with shutdown) ....			1	
56	6.1001	5124639	Manifold, exhaust (end outlet, dry, left bank) (without shutdown) ..			1	
56	6.1001	5124506	Manifold, exhaust (end outlet, dry, left bank) (without shutdown) ..			1	
76	6.1001	5176730	Manifold, exhaust (side outlet, dry) .....				4
56	6.1001	5158679	Manifold, exhaust (end outlet, dry, right bank) .....			1	
56	6.1001	5158680	Manifold, exhaust (end outlet, dry, left bank) .....			1	
4,57	6.1001	5166485	Manifold, exhaust (end outlet, water cooled) .....	2			
4,57	6.1001	5163809	Manifold, exhaust (end outlet, water cooled) .....		2		4
33,57	6.1001	5168773	Manifold Assy., exhaust (end outlet, water cooled) (includes plugs)			2	
56	6.1001	5188273	Washer, exhaust manifold .....	8	10	14	20
-	-	5111369	Crab, exhaust manifold .....	4	4	4	
56	6.1001	127855	Nut, 7/16"-20 hex. ....	8	10	14	20
-	-	113175	Plug, 1/8" brass pipe .....	2		2	
-	-	103880	Plug, 1/2" pipe .....			2	
-	-	5111798	Plug, 1" pipe .....			2	
56	6.1010	5122866	Gasket, exhaust manifold (side) (square end metal clad type) .....	2			
56	6.1010	5120224	Gasket, exhaust manifold (end) (square end, metal clad type) .....		4	4	8
56	6.1010	5150223	Gasket, exhaust manifold (intermediate) .....			2	
57	6.1010	5150194	Gasket, exhaust manifold (round end) .....	2			
56	6.1010	5150195	Gasket, exhaust manifold (end) (round end) .....		4		
56	6.1020	5112899	Stud, exhaust manifold to cylinder head .....	8	10	14	20
57	6.1100	5119921	Plate, exhaust manifold cover (plain) .....	6	6	6	10
-	-	5119923	Plate, exhaust manifold cover (tapped) .....				2
-	-	103647	Draincock, 1/4" .....				2
-	-	5163834	Washer, exhaust manifold cover plate .....	12	12	12	24
-	-	123197	Nut, 5/16-18 hex. ....	12	12	12	24
57	6.1110	5156319	Gasket, exhaust manifold cover plate .....	6	6	6	20
57	6.1120	5123282	Stud, exhaust manifold cover plate .....	12	12	12	24
-	-	5119926	Flange, exhaust manifold water outlet .....	2	2	2	8
-	-	5163834	Washer, exhaust manifold water flange .....	4	4	4	16
-	-	123197	Nut, 5/16"-18 hex. ....	4	4	4	16
57	6.1150	5156319	Gasket, exhaust manifold outlet flange .....	2	2	2	20
57	6.1160	5123282	Stud, exhaust manifold water outlet flange .....	4	4	4	16

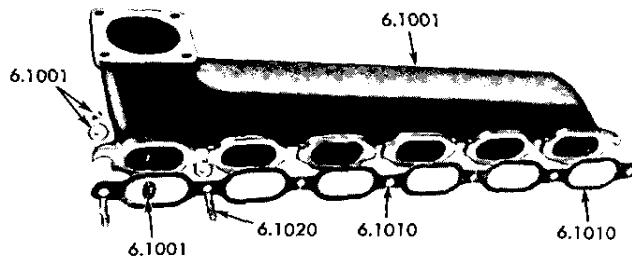


Fig. 56 - Exhaust Manifold - Dry

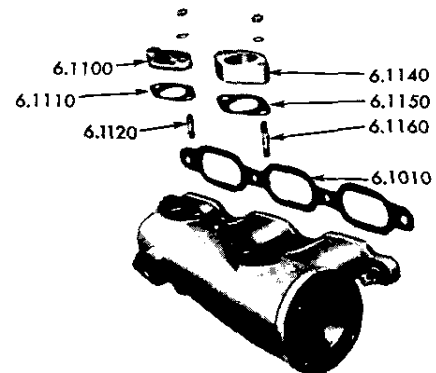


Fig. 57 - Exhaust Manifold - Wet

EXHAUST MUFFLER CONNECTIONS							
3,77	6.2085	5127039	Flange, exhaust (3 1/2" P.T., square flange) .....	2	2		
4	6.2085	5164146	Flange, exhaust (4" P.T. - 5 3/8" B.C., round flange) .....		2	2	4
4	6.2085	5168319	Flange, exhaust (3" P.T. - 4 3/8" B.C., round flange) .....	2			
3,43	6.2085	3222532	Flange, exhaust (3" P.T., square flange) .....	2			4
-	-	5167288	Elbow, exhaust (90° x 4" P.T., round flange) .....				4
-	-	113175	Plug, 1/8" pipe (brass) .....	2	2	2	4
-	-	2340301	Clamp, exhaust manifold (Marman, 3 13/16" dia.) .....	2	2		
-	-	2387401	Clamp, exhaust manifold (Marman, 4 1/2" dia.) .....		2		



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	186622	Bolt, 3/8"-16 x 1 1/4" hex. hd. ....				16
-	-	179847	Bolt, 3/8"-16 x 2" hex. hd. ....	8			
-	-	179848	Bolt, 3/8"-16 x 2 1/4" hex. hd. ....		8	8	16
-	-	103321	Lockwasher, 3/8" ....	8	8	8	16
-	-	103322	Lockwasher, 7/16" ....	8	8	8	
-	-	114544	Nut, 7/16" hex. ....	8	8	8	
-	-	5127038	Gasket, exhaust outlet (3 1/2" I.D.) (square) ....	2	2		
-	-	5163811	Gasket, exhaust outlet (4 3/8" I.D.) (round) ....		2	2	8
-	-	5166486	Gasket, exhaust outlet (3 1/8" I.D.) (round) ....	2			
-	-	3221863	Gasket, exhaust outlet (3 1/4" I.D.) (square) ....	2			4
-	-	3222533	Stud, exhaust outlet ....	8	8	8	16
<b>BATTERY CHARGING GENERATOR</b>							
Because of the variety of electrical equipment available, it is practical to list only the items shown below, which are most commonly used. In all cases it is advisable to furnish your GM Diesel dealer or distributor the model, unit, and identifying type number shown on the Option Plate on your engine							
3,4,21	7.1001	-	Generator ....	1	1	1	1
-	-	5168777	Pulley, generator (4 3/4" dia., 2 grooves) ....	1	1	1	
3	7.1500	5128694	Pulley, generator (3 1/2" dia., 1 groove, 7/8" shaft dia.) ....	1	1	1	
-	-	5124217	Pulley, generator (4 3/4" dia., 1 groove) ....	1	1	1	
3	7.1500	5128125	Pulley, generator (3 1/4" dia., 1 groove) ....	1			1
3	7.1500	5124705	Pulley, generator (3 1/2" dia., 1 groove, 11/16" shaft dia.) ....	1			
-	-	5168696	Pulley, generator drive (5 1/2" dia., 2 grooves) ....	1	1		
-	-	5122267	Pulley, generator drive (5" dia., 1 groove) ....	1	1	1	
-	-	5117637	Pulley, generator drive (5 1/2" dia., 1 groove) ....	1	1		
-	-	5100268	Pulley, generator drive (5 1/4" dia., 1 groove) ....				1
-	-	5129950	Pulley, generator drive (6 1/2" dia., 1 groove) ....				1
-	-	5155462	Seal, generator drive oil (2 1/4" O.D.) ....	1	1		1
-	-	5155445	Seal, generator drive oil (2 3/8" O.D.) ....	1	1		
-	-	5117638	Belt Set (2 belts), generator drive (31.146"L., .697"W.) ....	1	1		
3	7.1575	5124246	Belt, generator drive (41.5"L., .525"W.) ....	1	1	1	1
-	-	5178940	Belt, generator drive (29.052"L., .654"W.) ....	1			
-	-	5155911	Belt, generator drive (40.5"L., .774"W.) ....	1			
-	-	3224367	Belt, generator drive (40"L., .860"W.) ....	1			
3	7.1575	5125811	Belt, generator drive (38"L., .525"W.) ....	1	1	1	1
3	7.1575	5122421	Belt, generator drive (37.5"L., .525"W.) ....	1			
3	7.1575	5124708	Belt, generator drive (36"L., .525"W.) ....	1			
33	7.1580	5117685	Strap, generator adjusting (12" curved) ....	1	1		
-	-	5127005	Strap, generator adjusting (5.32" straight) ....	1			
33	7.1580	5124354	Strap, generator adjusting (12.20" curved, offset) ....	1	1	1	
33	7.1580	5117688	Strap, generator adjusting (12.42" curved) ....	1	1		
-	-	5124218	Strap, generator adjusting (8.70" straight) ....	1	1		
4,78	7.1580	5126549	Strap, generator adjusting (bracket) ....	1	1	1	
-	-	5126265	Strap, generator adjusting (5.88" straight) ....	1			
33	7.1580	5126799	Strap, generator adjusting (9.86" straight) ....		1	1	
-	-	5111421	Strap, generator adjusting ....				1
<b>STARTING MOTOR</b>							
Owing to the variety of electrical equipment furnished, it is practical to list part numbers for the attaching parts only. By furnishing your GM Diesel dealer or distributor with the type number on the Option Plate on your engine he can properly interpret your requirements.							
4,21,33	7.3001	-	Motor, starting ....	1	1	1	1
-	-	273666	Bolt, 5/8" - 11 x 1 3/8" 12 point hd ....	1	1	1	
-	-	271557	Bolt, 5/8" - 11 x 1 3/8" hex. hd. ....	2	2	2	2



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	271560	Bolt, 5/8" - 11 x 1 3/4" hex. hd. ....	3	3	3	
-	-	9414491	Bolt, 5/8" - 11 x 1 5/8" 12 point hd. ....				1
-	-	103325	Lockwasher, 5/8" .....	3	3	3	2
9	1.5075	5172492	Gasket, starting motor (marine engines) .....	1	1	1	1
<b>INSTRUMENT PANEL</b>							
58	7.4005	1582507	Panel, instrument mounting (3 openings, less instruments) .....	1	1	1	1
-	-	131979	Screw, #8-32 x 3/4" fil. hd. ....	3	3	3	3
-	-	5193755	Mounting Assy., instrument panel (anti-vibration) .....	3	3	3	3
58	7.4015	1501170	Ammeter, battery charging (50 amp) .....	1	1	1	1
58	7.4015	1501720	Ammeter, battery charging (60 amp.) .....	1	1	1	1
-	-	1568354	Medallion, instrument panel .....	1	1	1	1
-	-	120217	Lockwasher, #10 .....	AR	AR	AR	AR
-	-	120614	Nut, #10-24 hex. ....	AR	AR	AR	AR
-	-	1501631	Clamp ammeter .....	1	1	1	1
58	7.4060	1548430	Tachometer (C.W., 1000 RPM, mechanical) .....	1	1	1	1
58	7.4060	1536865	Tachometer (C.W., 2500 RPM, mechanical) .....	1	1	1	1
58	7.4060	1548428	Tachometer (C.W., 2500 RPM, mechanical) (back lighted) .....	1	1	1	1
58	7.4060	1536901	Tachometer (C.C.W., 2500 RPM, mechanical) .....	1	1	1	1
58	7.4060	1548429	Tachometer (C.W., 2500 RPM, electrical) .....	1	1	1	1
58	7.4061	5187601	Adaptor, tachometer mounting .....	1	1	1	1
-	-	1548005	Drive Unit, tachometer (electrical) .....	1	1	1	1
-	-	5124621	Boot, tachometer drive unit .....	1	1	1	1
58	7.4063	5186851	Retainer Assy., tachometer (includes mounting assy) .....	1	1	1	1
-	-	5193754	Mounting Assy., tachometer (anti-vibration) .....	3	3	3	3
-	-	1580377	Clamp, tachometer .....	1	1	1	1
58	7.4070	1508352	Gage, oil pressure (80#) (engine) .....	1	1	1	1
58	7.4070	1508354	Gage, oil pressure (80#) (engine) (back lighted) .....	1	1	1	1
-	-	118748	Connector, 1/4" fl. tube .....	1	1	1	1
58	7.4071	1508353	Gage, oil pressure (200#) (torque converter) .....	1	1	1	
58	7.4071	1508355	Gage, oil pressure (200#) (torque converter) (back lighted) .....	1	1	1	1
58	7.4071	1507512	Gage, oil pressure (150#) (reverse gear) .....	1	1	1	
-	-	118748	Connector, 1/4" fl. tube .....	1	1	1	1
-	-	1512381	Clamp, oil pressure gage .....	2	2	2	2
-	-	5183595	Hose, oil pressure gage (flex. 3/16" I.D. x 16") .....	1	1	1	
-	-	5126734	Hose, oil pressure gage (flex. 3/16" I.D. x 18") .....	1	1	1	
-	-	5125147	Hose, oil pressure gage (flex. 3/16" I.D. x 34") .....	1	1	1	
-	-	2324671	Hose, oil pressure gage (flex. 3/16" I.D. x 58") .....	1	1	1	
-	-	5126736	Hose, oil pressure gage (flex. 3/16" I.D. x 108") .....	1	1	1	
-	-	9409931	Elbow, 1/8" street 90° .....	1	1	1	
-	-	444052	Elbow, 1/8" street 45° .....	1	1	1	
-	-	120401	Elbow, 1/4" street .....	1	1	1	
-	-	1508350	Fitting, restriction (1/8" P.T. both ends) .....	1	1	1	
-	-	1507333	Fitting, restriction (1/8" P.T. and 7/16" - 24) .....	1	1	1	
-	-	112877	Bushing, 1/4" x 1/8" red. pipe .....	1	1	1	
-	-	179735	Bushing, 3/4" x 1/8" red. pipe .....	1	1	1	
-	-	5163538	Clip (3/16" dia.) .....	3	3	3	
-	-	140580	Clip (3/8" dia.) .....	AR	AR	AR	
-	-	179835	Bolt, 3/8" - 16 x 5/8" hex. hd. ....	1	1	1	
-	-	103321	Lockwasher, 3/8" .....	1	1	1	
58	7.4077	1513557	Gage, oil temperature (3' capillary) .....	1	1	1	1
58	7.4077	1514215	Gage, oil temperature (12' capillary) .....	1	1	1	1
58	7.4077	1513556	Gage, oil temperature (15' capillary) .....	1	1	1	1
58	7.4077	1514650	Gage, oil temperature (44' capillary) .....	1	1	1	1
-	-	120614	Nut, #10-32 hex. ....	AR	AR	AR	AR
-	-	1512831	Clamp, oil temperature gage .....	1	1	1	1
58	7.4080	1513554	Gage, water temperature (16" capillary) (armored cable) .....	1	1	1	1
58	7.4080	1513095	Gage, water temperature (16 1/4" capillary) .....	1	1	1	1
58	7.4080	1513549	Gage, water temperature (27" capillary) .....	1	1	1	1
58	7.4080	1513553	Gage, water temperature (49" capillary) .....	1	1	1	1
58	7.4080	1513550	Gage, water temperature (73" capillary) .....	1	1	1	1
58	7.4080	1513551	Gage, water temperature (180" capillary) .....	1	1	1	1



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
58	7.4080	1513552	Gage, water temperature (360" capillary) .....	1	1	1	2
-	-	144034	Bushing, 3/4" x 1/2" red. pipe .....	1	1	1	1
-	-	1512381	Clamp, water temperature gage .....	1	1	1	2
-	-	5161896	Clip, 3/16" .....	AR	AR	AR	AR
-	-	859151	Adaptor (5/8" - 18) water temperature gage .....	1	1	1	2
-	-	1569992	Medallion, instrument panel .....	1	1	1	1
-	-	5175547	Bracket, instrument panel medallion .....	1	1	1	1
-	-	120614	Nut, #10-32 hex. ....	1	1	1	1
-	-	1584145	Cable, lamp bulb (single socket) .....	5	5	5	5
-	-	127934	Bulb, 12-16V. lamp .....	5	5	5	5
58	7.4115	1996027	Switch, engine starting .....	1	1	1	2
-	-	1567238	Plate, engine starting switch name .....	1	1	1	1

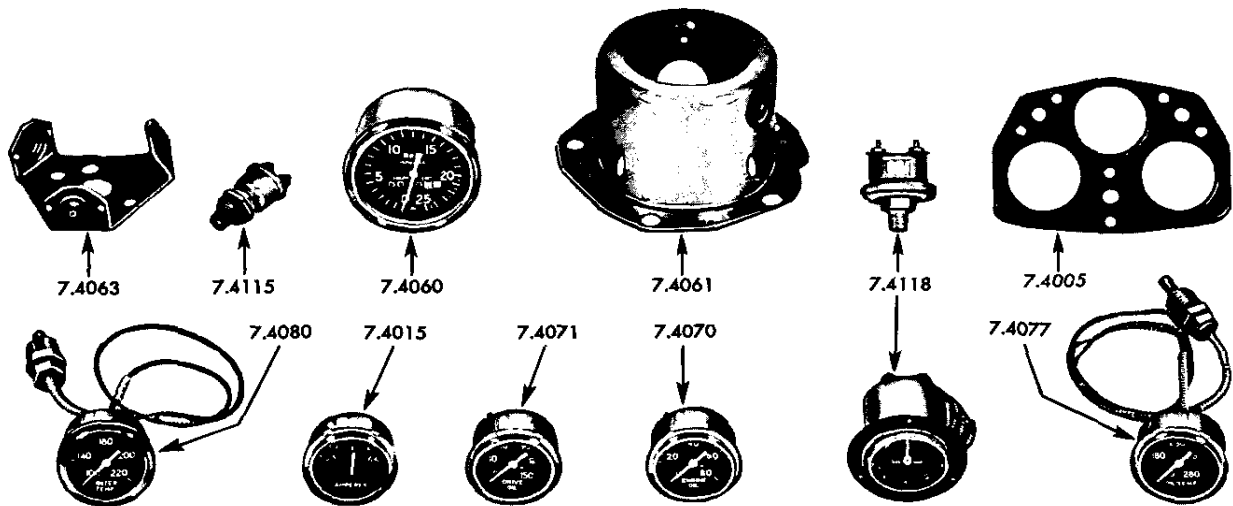


Fig. 58 - Instruments

TACHOMETER DRIVE							
61	7.4405	1536033	Shaft Assy., tachometer drive flex. (3 3/4") .....	1	1	1	1
-	-	1568956	Shaft Assy., tachometer drive flex. (40") .....	1	1	1	1
-	-	1536316	Shaft Assy., tachometer drive flex. (60") .....	1	1	1	1
-	-	1535103	Shaft Assy., tachometer drive flex. (72") .....	1	1	1	1
-	-	849539	Shaft Assy., tachometer drive flex. (90") .....	1	1	1	1
-	-	1569668	Shaft Assy., tachometer drive flex. (120") .....	1	1	1	1
-	-	1569669	Shaft Assy., tachometer drive flex. (180") .....	1	1	1	2
-	-	846430	Adaptor, tachometer cable (coupling) .....	1	1	1	1
-	-	5177623	Clip, tachometer drive flexible shaft (includes key) .....	1	1	1	1
59	7.4420	1536341	Adaptor, tachometer drive cable (90° L.H., 1:250 ratio) (includes key) .....	1	1	1	1
59	7.4420	1565185	Adaptor, tachometer drive cable (90° R.H., 1:250 ratio) (includes key) .....	1	1	1	1
59	7.4420	1569407	Adaptor, tachometer drive cable (90° L.H., 1:250 ratio, double outlet) (includes key) .....	1	1	1	1
-	-	1581087	Adaptor, tachometer drive cable (90° L.H., 1:500 ratio, double outlet) .....	1	1	1	1
59	7.4420	1569406	Adaptor, tachometer drive cable (90° R.H., 1:250 ratio, double outlet) (includes key) .....	1	1	1	1
59	7.4420	1566827	Adaptor, tachometer drive cable (90° L.H., 1:500 ratio) (includes key) .....	1	1	1	1
59	7.4420	1565192	Adaptor, tachometer drive cable (90° R.H., 1:500 ratio) (includes key) .....	1	1	1	1



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
59	7.4420	1565168	Adaptor, tachometer drive cable (90° L.H., 1:1 ratio) (includes key) .....	1	1	1	1
59	7.4420	1565170	Adaptor, tachometer drive cable (90° R.H., 1:1 ratio) (includes key) .....	1	1	1	1
34,59	7.4420	1582290	Key, tachometer drive .....	1	1	1	1
-	-	1585564	Key and Seal Assy., tachometer drive .....	1	1	1	1
59	7.4435	5155861	Shaft Assy., tachometer (2 1/2" L.) .....	1	1	1	1
59	7.4435	5117299	Shaft Assy., tachometer (3 15/16" L.) .....	1	1	1	1
59	7.4435	5117753	Shaft Assy., tachometer (5 15/16" L.) .....	1	1	1	1
60	7.4435	3224992	Shaft, tachometer (2 3/8" L.) .....	1	1	1	1
60	7.4435	5123863	Shaft, tachometer (1 13/16" L.) .....	1	1	1	1
59,61	7.4440	5155818	Slinger, tachometer drive shaft oil .....	1	1	1	1
60	7.4445	5125153	Cover Assy., tachometer drive (includes seal) .....	1	1	1	1
59	7.4445	5123118	Cover Assy., tachometer drive (includes studs) .....	1	1	1	1
-	-	5123267	Cover Assy., tachometer drive (flywheel housing, small hole cover) .....	1	1	1	1
61	7.4445	3290413	Cover Assy., tachometer drive (includes seal) .....	1	1	1	1
-	-	5122227	Gasket, tachometer drive cover .....	1	1	1	1
59	7.4445	5155854	Stud, tachometer drive adaptor (5/16" - 24 x 1 1/32") .....	2	2	2	2
60,61	7.4450	3202615	Seal, tachometer drive cover .....	1	1	1	1
59	7.4455	5155816	Gasket, tachometer drive adaptor (with 5155819) .....	1	1	1	1
-	-	5190566	Gasket, tachometer drive adaptor (with 5122635) .....	1	1	1	1
59	7.4457	5155819	Adaptor, tachometer drive (blower drive shaft) .....	1	1	1	1
-	-	5122635	Adaptor, tachometer drive (balance weight cover) .....	1	1	1	1
54	7.4457	5117298	Adaptor, tachometer drive (blower end plate cover) (1.64" L.) ....	1	1	1	1
54	7.4457	5117757	Adaptor, tachometer drive (blower end plate cover) (3.64" L.) ....	1	1	1	1
61	7.4457	5158289	Adaptor, tachometer drive (2 15/16" L.) .....	1	1	1	1

Fig. 59 - Tachometer Drive

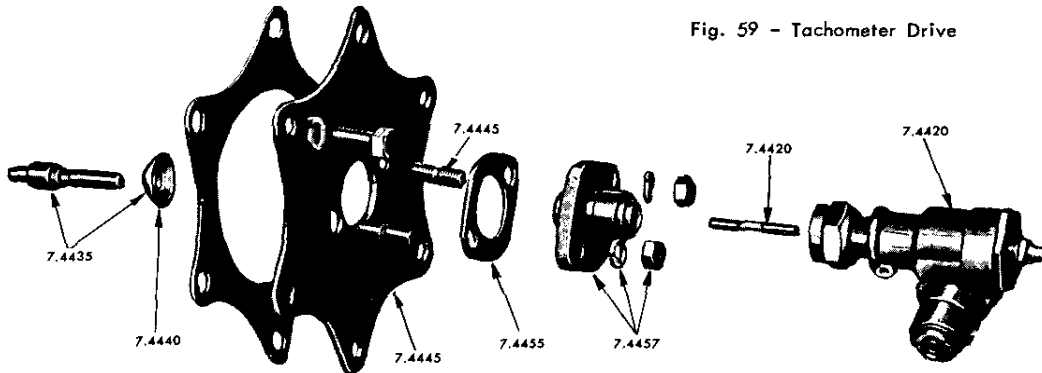


Fig. 60 - Tachometer Drive

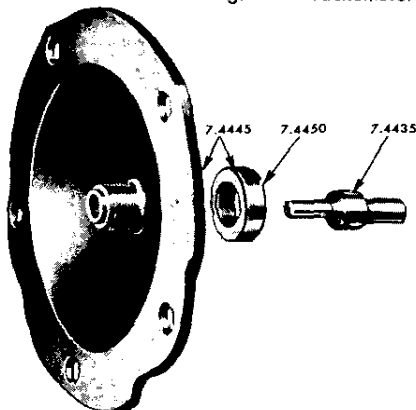
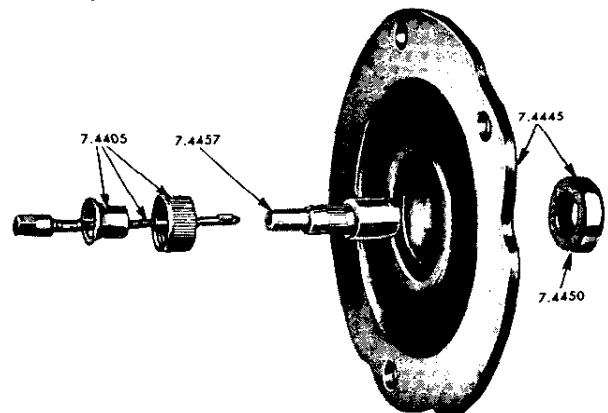


Fig. 61 - Tachometer Drive





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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
			<b>SHUT-OFF OR ALARM SYSTEM</b>				
			The proper tube assemblies for your engine can be interpreted by your GM Diesel dealer or distributor. Furnish him the model and type number on the Option Plate.				
52	7.4505	5173018	Alarmstat (thermo switch) .....	1	1	1	
-	-	5120976	Valve Assy., water temperature .....	1	1	1	
-	-	5163830	Gasket .....	1	1	1	
-	-	143483	Tee, 5/16" inv. fl. tube .....	1	1	1	
-	-	178378	Lockwasher, #10 int. ext. tooth .....	1	1	1	
-	-	5123838	Adaptor Assy., water temperature switch .....	1	1	1	
-	-	5113655	Stud, 5/16" - 18 x 2.46" water temperature switch adaptor .....	2	2	2	
-	-	103878	Plug, 1/4" pipe .....		1	1	
-	-	103320	Lockwasher, 5/16" .....	2	2	2	
-	-	121917	Nut, 5/16" - 24 hex. ....	2	2	2	
-	-	5113412	Gasket, water temperance switch adaptor .....	1	1	1	
-	-	3291184	Bell, alarm system .....	1	1	1	
-	-	3290747	Relay (12V), alarm bell .....	1	1	1	
-	-	1118128	Solenoid, air shut-off (12V) .....	1			
-	-	186630	Bolt, 1/4" - 20 x 5/8" hex. ....	4			
-	-	120392	Washer, 1/4" flat .....	4			
-	-	103319	Lockwasher, 1/4" .....	4			
-	-	122161	Nut, 1/4" - 28 hex. (jam) .....	2			
-	-	123390	Nut, 1/4" - 20 hex. ....	4			
-	-	1990953	Wire, air shut-off control (reset) (50" L.) .....	1	1	1	
-	-	1990954	Wire, air shut-off control (reset) (60" L.) .....	1	1	1	
-	-	5126538	Plate, air shut-off control wire instruction .....	1	1	1	
-	-	5168374	Nut, air shut-off control valve .....	1	1	1	
-	-	273669	Pin, 5/16" x 7/16" L. spring .....	1	1	1	
-	-	100659	Screw, #10 - 32 x 3/8" rd. hd. sl. ....	1	1	1	
-	-	120385	Washer, #10 flat .....	1	1	1	
-	-	110730	Lockwasher, 3/8" .....	1	1	1	
-	-	122236	Nut, 3/8" - 24 hex. ....	1	1	1	
-	-	3290569	Clip, air shut-off control wire .....	1	1	1	
-	-	5128228	Bracket, air shut-off solenoid .....	1			
-	-	120854	Bolt, 1/4" - 20 x 5/8" hex. hd. ....	3			
-	-	120380	Lockwasher, 1/4" .....	3			
-	-	5115836	Link, air shut-off solenoid control .....	1	1	1	
-	-	5128227	Link, air shut-off solenoid control .....	1			
-	-	112526	Pin, 1/16" x 3/8" cotter .....	1	1	1	
-	-	5115204	Bolt (1/4" - 28 x 1.26" L.) .....	1	1	1	
-	-	120380	Lockwasher, 1/4" .....	1	1	1	
-	-	122161	Nut, 1/4" - 28 hex. (jam) .....	1	1	1	
-	-	5113159	Box Assy., air shut-off control .....	1	1	1	
-	-	186630	Bolt, 1/4" - 20 x 5/8" .....	1	1	1	
-	-	103319	Lockwasher, 1/4" .....	1	1	1	
-	-	5113160	Cover, air shut-off control box .....	1	1	1	
-	-	271169	Washer Assy., air shut-off control box .....	2	2	2	
-	-	5125878	Spring, air shut-off reset latch (5.5" free length) .....	1	1	1	
-	-	5128972	Spring, air shut-off reset latch (7.7" free length) .....	1	1	1	
75	7.4586	1507289	Switch, oil pressure .....	1	1	1	
-	-	5126528	Bellows Assy., oil pressure switch .....	1	1	1	
-	-	5177752	Elbow (1/8" x 1/8" x 1/4") restriction .....	1	1	1	
-	-	120401	Elbow, 1/8" street 90° .....	1	1	1	
-	-	444000	Adaptor, 1/4" pipe (brass) .....	1	1	1	
-	-	132105	Screw, #10 - 32 x 3/8" rd. hd. sl. ....	1	1	1	
-	-	120217	Lockwasher, #10 .....	AR	AR	AR	
-	-	120614	Nut, #10-32 hex. ....	AR	AR	AR	
-	-	-	Tube, oil pressure switch .....	1	1	1	
-	-	5127706	Connector, oil pressure switch tube .....	1	1	1	
-	-	5126307	Connector (5/16" inv. fl. tube) .....	1	1	1	



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5126391	Tee (1/4" inv. fl. tube) .....	1	1	1	
-	-	9413261	Tee (5/16" inv. fl. tube) .....	1	1	1	
-	-	116341	Elbow, 5/16" inv. fl. tube 45° .....	1	1	1	
-	-	137423	Elbow, 3/8" inv. fl. tube 90° .....	1	1	1	
-	-	-	Tube, oil pressure switch return .....	1	1	1	
-	-	137403	Connector, 1/8" inv. fl. tube .....	1	1	1	
-	-	137407	Connector, 3/8" inv. fl. tube .....	1	1	1	
-	-	137423	Elbow, 3/8" inv. fl. tube .....	1	1	1	
-	-	116524	Bushing, 1/2" x 1/4" red. pipe .....	1	1	1	
-	-	442348	Tee, 3/8" inv. fl. tube .....	1	1	1	
-	-	3292162	Switch, alarm shut-off .....	1	1	1	
-	-	5186484	Governor Assy., overspeed trip, 2500-4200 RPM } (includes	1	1	1	
-	-	5110132	Governor Assy., overspeed trip, 3800-5200 RPM } indented items)	1	1	1	
-	-	442347	Tee, 1/8" x 1/2" x 1/2" .....	1	1	1	
-	-	143483	Tee, 5/16" inv. fl. tube .....	1	1	1	
-	-	5193654	Housing, hydraulic overspeed governor .....	1	1	1	
-	-	5193657	Ballhead, overspeed trip governor .....	1	1	1	
-	-	5193659	Pin, overspeed trip governor ballhead .....	2	2	2	
-	-	5193660	Ring, overspeed trip governor ballhead retaining .....	1	1	1	
-	-	5193656	Plunger, overspeed trip governor pilot valve .....	1	1	1	
-	-	5193658	Weight, overspeed trip governor .....	1	1	1	
-	-	5193664	Cover, overspeed trip governor housing .....	1	1	1	
-	-	5193663	Screw, spring tension adjusting .....	1	1	1	
-	-	187828	Bolt, #10 - 32 x 1/2" socket hd. ....	3	3	3	
-	-	120217	Lockwasher, #10 .....	3	3	3	
-	-	123179	Nut, 1/4" - 20 hex. ....	1	1	1	
-	-	5125184	Adaptor, overspeed trip governor .....	1	1	1	
-	-	5182975	Seal, overspeed trip governor adaptor .....	1	1	1	

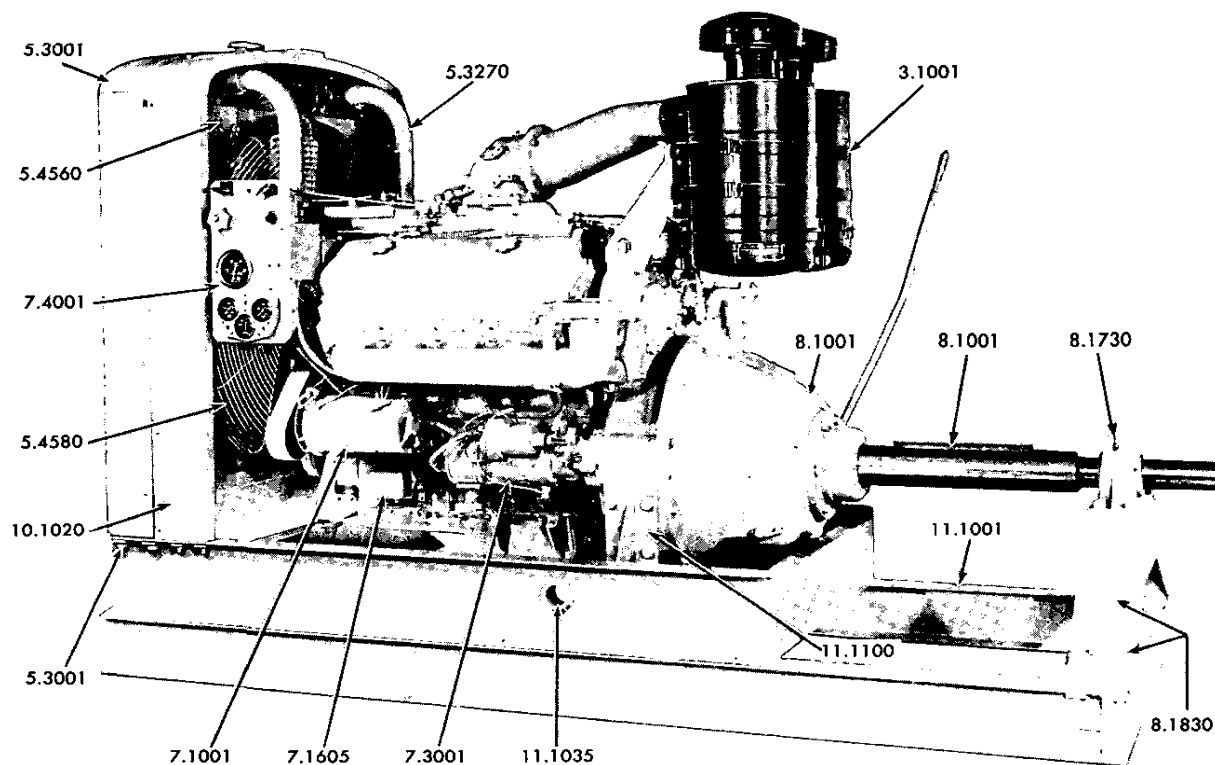


Fig. 62 - Typical Power Take-off Engine



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	140869	Screw, #10-24 x 5/16" set .....	1	1	1	
-	-	179839	Bolt, 3/8"-16 x 1" .....	2	2	2	
-	-	119092	Bolt, 3/8"-16 x 4 3/4" .....	4	4	4	
-	-	103321	Lockwasher, 3/8" .....	6	6	6	
-	-	5193665	Gasket, overspeed trip governor housing cover .....	1	1	1	
-	-	5194787	Seal Ring, overspeed trip governor housing cover .....	1	1	1	
-	-	5122227	Gasket, overspeed trip governor adaptor .....	1	1	1	
-	-	5123655	Cable Assy., overspeed trip governor operating (includes bearing) .....	1	1	1	
-	-	5193661	Bearing, overspeed trip governor operating shaft .....	1	1	1	
-	-	5194640	Spring, overspeed trip governor (speeder) (with 5110132) .....	1	1	1	
-	-	5193662	Spring, overspeed trip governor (speeder) (with 5186484) .....	1	1	1	
-	-	5128124	Valve, overspeed (low oil pressure) .....			1	
-	-	5127789	Bracket, overspeed valve .....			1	
-	-	186619	Bolt, 1 3/8"-16 x 1 1/8" hex. hd. ....			2	
-	-	181384	Bolt, 3/8"-24 x 2 3/4" hex. hd. ....			2	
-	-	103321	Lockwasher, 3/8" .....				AR
-	-	-	Tube Assy., overspeed governor oil supply .....	1	1	1	
-	-	5127798	Tube Assy., solenoid valve (dev. L. 13.28") (block to overspeed valve) .....			1	
-	-	5127855	Tube Assy., solenoid valve (dev. L. 18.74") (air box to overspeed valve) .....			1	
-	-	5127706	Connector, solenoid valve tube .....			1	
-	-	137407	Connector, 3/8" inv. fl. tube .....			1	
-	-	5127510	Tee (3/8" tube) .....			1	
-	-	5127806	Tube Assy., exhaust manifold water inlet .....	1			
-	-	5127831	Tube Assy., exhaust manifold water inlet .....		1		
-	-	5128620	Tube Assy., exhaust manifold water inlet .....			1	
-	-	5127610	Tee (3/8" inv. fl. tube) .....	1	1	1	
-	-	137407	Connector, 3/8" inv. fl. tube .....	1	1	1	
-	-	5127770	Tube Assy., exhaust manifold water outlet .....	1			
-	-	5128634	Tube Assy., exhaust manifold water outlet .....		1		
-	-	5127388	Tube Assy., exhaust manifold water outlet .....			1	
-	-	137407	Connector, 3/8" inv. fl. tube .....	1	1	1	
-	-	137423	Elbow, 3/8" inv. fl. tube .....	1	1	1	
-	-	116524	Bushing, 1/2"-1/4" red. pipe .....	1	1	1	
<b>POWER TAKE-OFF</b>							
-	-	5185573	Power Take-off Assy. (front) (8" clutch, direct drive) .....	1	1	1	
33,52	8.1001	5183598	Power Take-off Assy. (front) (11 1/2" clutch, 3:1 red.) .....	1	1	1	
62	8.1001	5124173	Power Take-off Assy. (rear) (14" clutch, double plate, long shaft) .....	1	1	1	
62	8.1001	5115883	Power Take-off Assy. (rear) (18" clutch, single plate, long shaft) .....		1		
62	8.1001	5115884	Power Take-off Assy. (rear) (18" clutch, double plate, short shaft) .....			1	1
62	8.1001	5108510	Power Take-off Assy. (rear) (18" clutch, double plate, short shaft, heavy duty feramic clutch facing) .....				1
62	8.1001	5115885	Power Take-off Assy. (rear) (18" clutch, double plate, long shaft) .....		1	1	
-	-	5126593	Power Take-off Assy. (rear) (18" clutch, 1.47:1 red.) .....			1	
-	-	5126594	Power Take-off Assy. (rear) (18" clutch, 1.73:1 red.) .....			1	
-	-	5123724	Power Take-off Assy. (rear) (18" clutch, 2:1 red.) .....			1	
63	8.1001	5192488	Key, power take-off pulley (1/2" x 1/2" x 5") .....	1	1	1	
33,64	8.1001	5191695	Key, power take-off pulley (5/8" x 5/8" x 3 3/8") .....	1	1	1	
-	-	5194135	Clutch Assy. (8") .....	1	1	1	
-	-	5194289	Clutch Assy. (11 1/2") .....	1	1	1	
-	-	5196876	Clutch Assy. (14") .....	1	1	1	
-	-	5195429	Clutch Assy. (18" single plate) .....		1		
-	-	5195470	Clutch Assy. (18" double plate) .....		1	1	1
-	-	5196926	Clutch Assy. (18" heavy duty, feramic facing) .....				1
63	8.1017	5192489	Key, clutch to shaft (1/4" x 1/4" x 2") .....	1	1	1	
64	8.1017	5193450	Key, clutch to shaft (3/8" x 1/2" x 2 1/4") .....	1	1	1	
65	8.1017	5192841	Key, clutch to shaft (3/8" x 1/2" x 4 1/2") .....	1	1	1	
65	8.1017	5193779	Key, clutch to shaft (1/2" x 5/8" x 3 3/4") .....	1	1	1	
65	8.1018	5192358	Ring, clutch driving (8") .....	1	1	1	
66	8.1018	5192163	Ring, clutch driving (11 1/2") .....	1	1	1	
63,64	8.1018	5192832	Ring, clutch driving (14") .....	1	1	1	
-	-	5193788	Ring, clutch driving (18" single plate) .....		1		

(includes  
indented  
items)....



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5194428	Ring, clutch driving (18" double plate) .....		1	1	1
63	8.1030	5193426	Facing, clutch (3 segments) (8") .....	1	1	1	
64	8.1030	5192165	Facing, clutch (3 segments) (11 1/2") .....	1	1	1	
65	8.1030	5192129	Facing, clutch (3 segments) (14") .....	2	2	2	
65	8.1030	5194521	Facing, clutch (3 segments) (18" single plate) .....	1	1	1	
63	8.1030	5194521	Facing, clutch (3 segments) (18" double plate) .....	2	2	2	2
63	8.1030	5196722	Facing, clutch (1 piece, feramic, 18" double plate) .....				2
63	8.1080	5193415	Plate, clutch pressure (inner) (8") .....	1	1	1	
63	8.1080	5194142	Plate, clutch pressure (outer) (8") .....	1	1	1	
64	8.1080	5194290	Plate, clutch pressure (inner) (11 1/2") .....	1	1	1	
64	8.1080	5194141	Plate, clutch pressure (outer) (11 1/2") .....	1	1	1	
64	8.1080	5192824	Plate, clutch pressure (inner) (14") .....	1	1	1	
63	8.1080	5192835	Plate, clutch pressure (center) (14") .....	1	1	1	
63	8.1080	5192834	Plate, clutch pressure (outer) (14") .....	1	1	1	
64	8.1080	5193866	Plate, clutch pressure (inner) (18") .....		1	1	1
64,65	8.1080	5193864	Plate, clutch pressure (outer) (18" single plate) .....		1		
63	8.1080	5194433	Plate, clutch pressure (center) (18") .....		1	1	1
63	8.1080	5194434	Plate, Assy., clutch pressure (outer) (18" double plate) .....		1	1	1
65	8.1100	5194139	Spring, clutch toggle lever (8") .....	1	1	1	
66	8.1100	5194138	Spring, clutch toggle lever (11 1/2") .....	1	1	1	
63,64	8.1100	5122926	Spring, clutch toggle lever (14") .....	4	4	4	
65	8.1135	5193414	Spring, clutch pressure plate return (coil) (8") .....	3	3	3	
66	8.1135	5193431	Spring, clutch pressure plate return (coil) (11 1/2") .....	3	3	3	
65	8.1135	5194079	Spring, clutch pressure plate return (inner) (18" single plate)..		4		
65	8.1135	5194078	Spring, clutch pressure plate return (outer) (18" single plate)..		4		
-	-	5194432	Spring, clutch pressure plate return (inner) (18" double plate)..		4	4	4
-	-	5194431	Spring, clutch pressure plate return (outer) (18" double plate)..		4	4	4
-	8.1142	5194140	Lever, clutch release (toggle) (8" and 11 1/2") .....	3	3	3	
-	8.1142	5193422	Pin, clutch release yoke lever (to pressure plate) (8" and 11 1/2") .....	3	3	3	
-	8.1142	5192142	Ring, retaining (release lever pin) .....	3	3	3	
63	8.1142	5122925	Lever, clutch release (toggle) (14") .....	4	4	4	
63	8.1142	5195412	Lever Assy., clutch release yoke (18") (includes 5 items marked #) .....		4	4	4
63	8.1142	5192134	Pin, clutch release lever to pressure plate (14") .....	4	4	4	

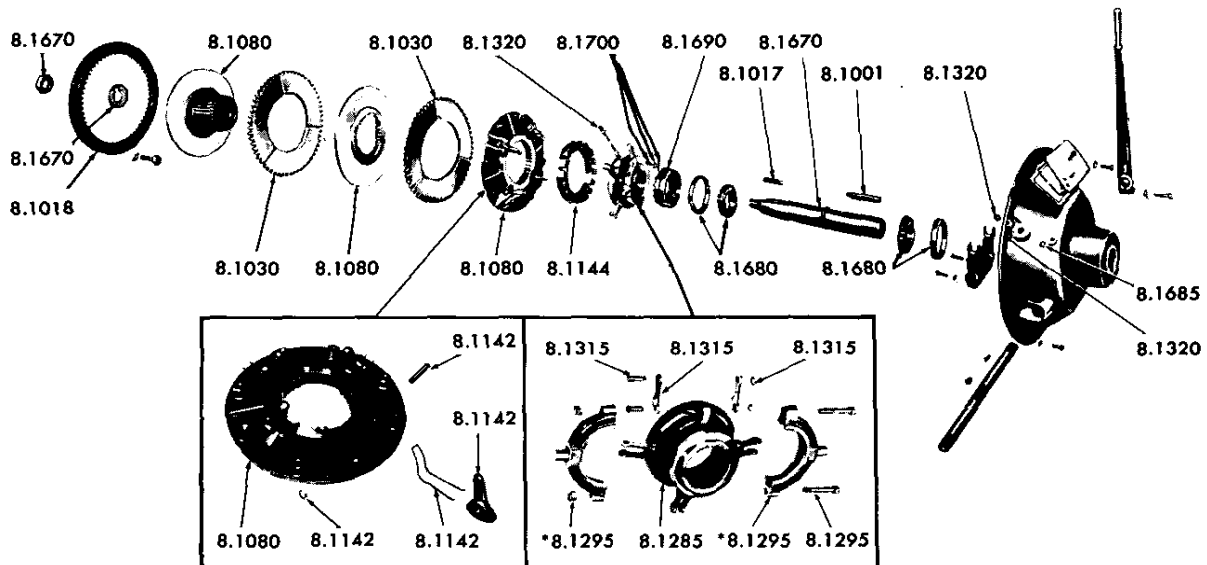


Fig. 63 - Power Take-off (Double Plate Clutch, Direct Drive)



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5193873 #	Pin, clutch release yoke lever (18") .....		4	4	4
-	-	5193872 #	Pin, clutch release yoke lever roller (18") .....		4	4	4
-	-	5193871 #	Roller, clutch release yoke lever (18") .....		4	4	4
63	8.1142	5192135	Ring, clutch release yoke lever retaining (14") .....	8	8	8	8
-	-	5193875 #	Washer, clutch release yoke lever (1/2" I.D.) (18") .....	8	8	8	8
-	-	148402 #	Bearing, clutch release yoke lever (18") .....	12	12	12	12
65	8.1144	5193424	Nut, clutch adjusting (8") .....	1	1	1	
66	8.1144	5193430	Nut, clutch adjusting (11 1/2") .....	1	1	1	
63,64	8.1144	5196872	Nut Assy., clutch adjusting (includes lock) (14") .....	1	1	1	
-	-	5193865	Ring, clutch adjusting (18") .....		1	1	1
65	8.1145	5193423	Lock, clutch adjusting nut (8") .....	1	1	1	
66	8.1145	5196867	Lock, clutch adjusting nut (11 1/2") .....	1	1	1	
65,66	8.1145	114351	Screw, 1/4"-20 x 3/8" fil. hd. sl. ....	1	1	1	
65,66	8.1145	114604	Lockwasher, 1/4" ext. tooth .....	1	1	1	
-	-	5194105	Lock, clutch adjusting nut (18") .....		1	1	1
65	8.1285	5193417	Sleeve, clutch release (8") .....	1	1	1	
66	8.1285	5193432	Sleeve, clutch release (11 1/2") .....	1	1	1	
63,64	8.1285	5192139	Sleeve, clutch release (14") .....	1	1	1	

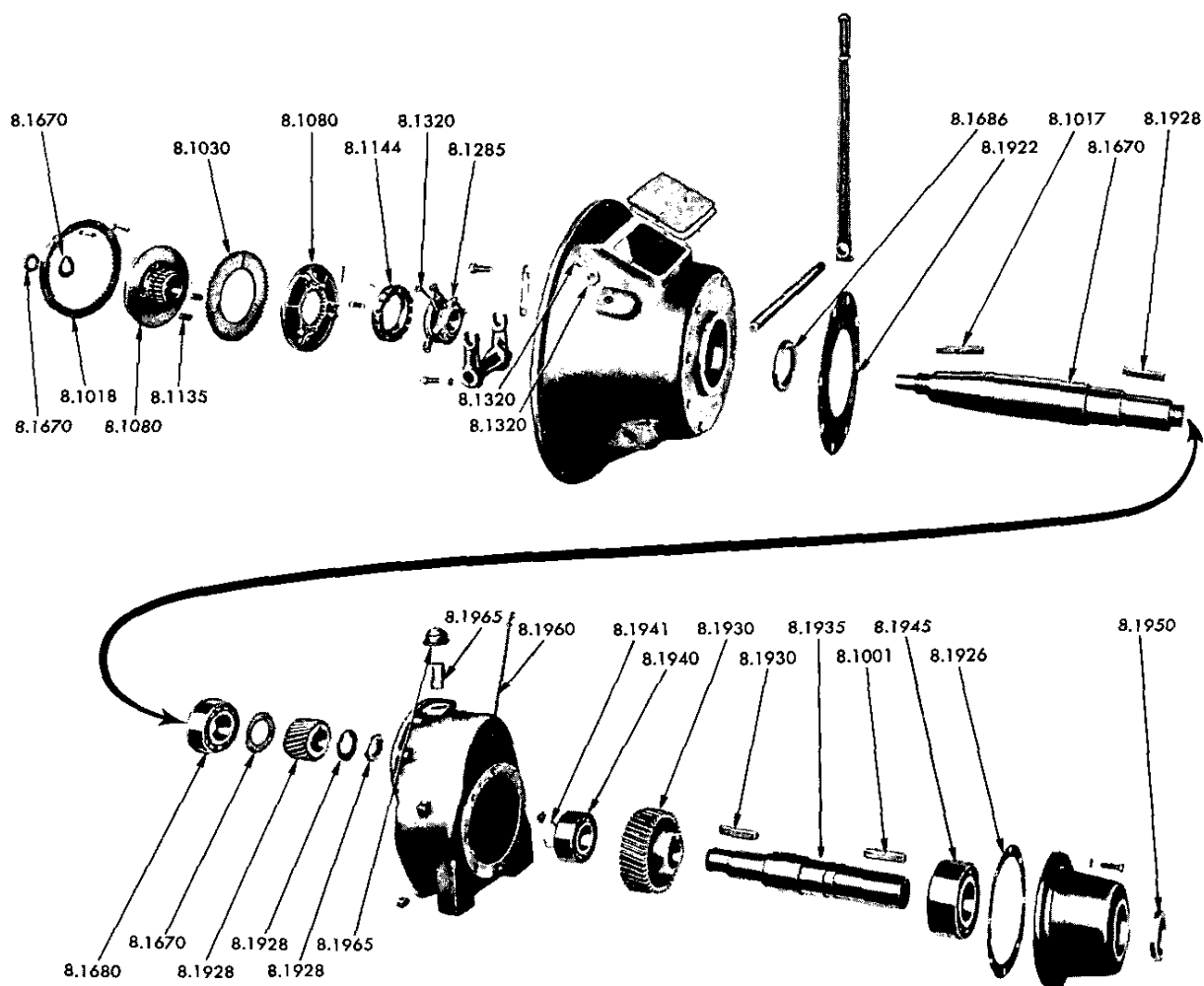


Fig. 64 - Rear Power Take-off (Single Plate Clutch, Reduction Drive)



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5195431	Sleeve, clutch release (18") .....		1	1	1
65,66	8.1295	5196715	Collar Assy., clutch release (8" and 11 1/2") .....	1	1	1	
65	8.1295	5197139	Collar Assy., clutch release (14") .....	1	1	1	
-	-	5195434	Collar, clutch release (18") .....		1	1	1
-	-	5195435	Ring, clutch release retaining (internal) (18") .....		1	1	1
-	-	5195436	Ring, clutch release retaining (external) (18") .....		1	1	1
65,66	8.1315	5193421	Link, clutch release yoke (8" and 11 1/2") .....	6	6	6	
65,66	8.1315	5193420	Pin, clutch release yoke link (8" and 11 1/2") .....	6	6	6	
65,66	8.1315	5192176	Ring, retaining (8" and 11 1/2") .....	6	6	6	
63	8.1315	5192140	Link, clutch release yoke (14") .....	1	1	1	
63	8.1315	5192141	Pin, clutch release yoke link (14") .....	1	1	1	
65	8.1320	5192493	Hose, clutch release bearing (flex.) (8") .....	1	1	1	
66	8.1320	5193064	Hose, clutch release bearing (flex.) (9") .....	1	1	1	
63	8.1320	119512	Fitting, 1/8" lube (clutch release bearing) .....	1	1	1	
63	8.1320	122366	Nut, 5/8"-18 hex. ....	1	1	1	
63,64	8.1320	5122296	Hose, clutch release bearing lube (flex.) (14") .....	1	1	1	
67	8.1450	954421	Bearing, clutch pilot (8") .....	1	1	1	

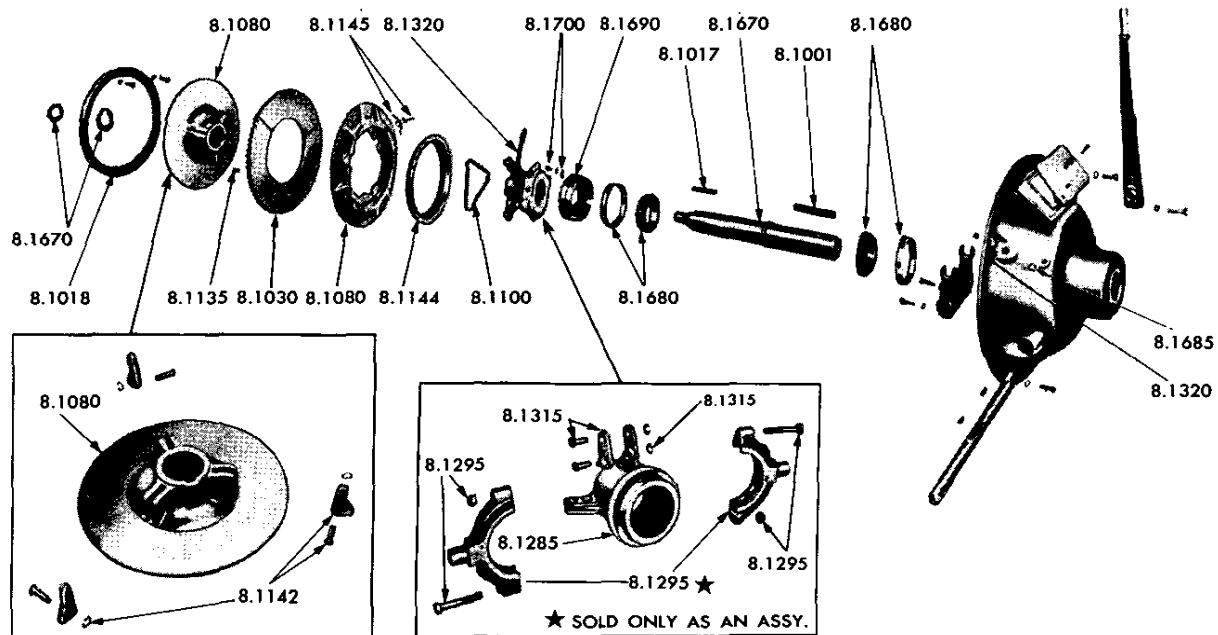


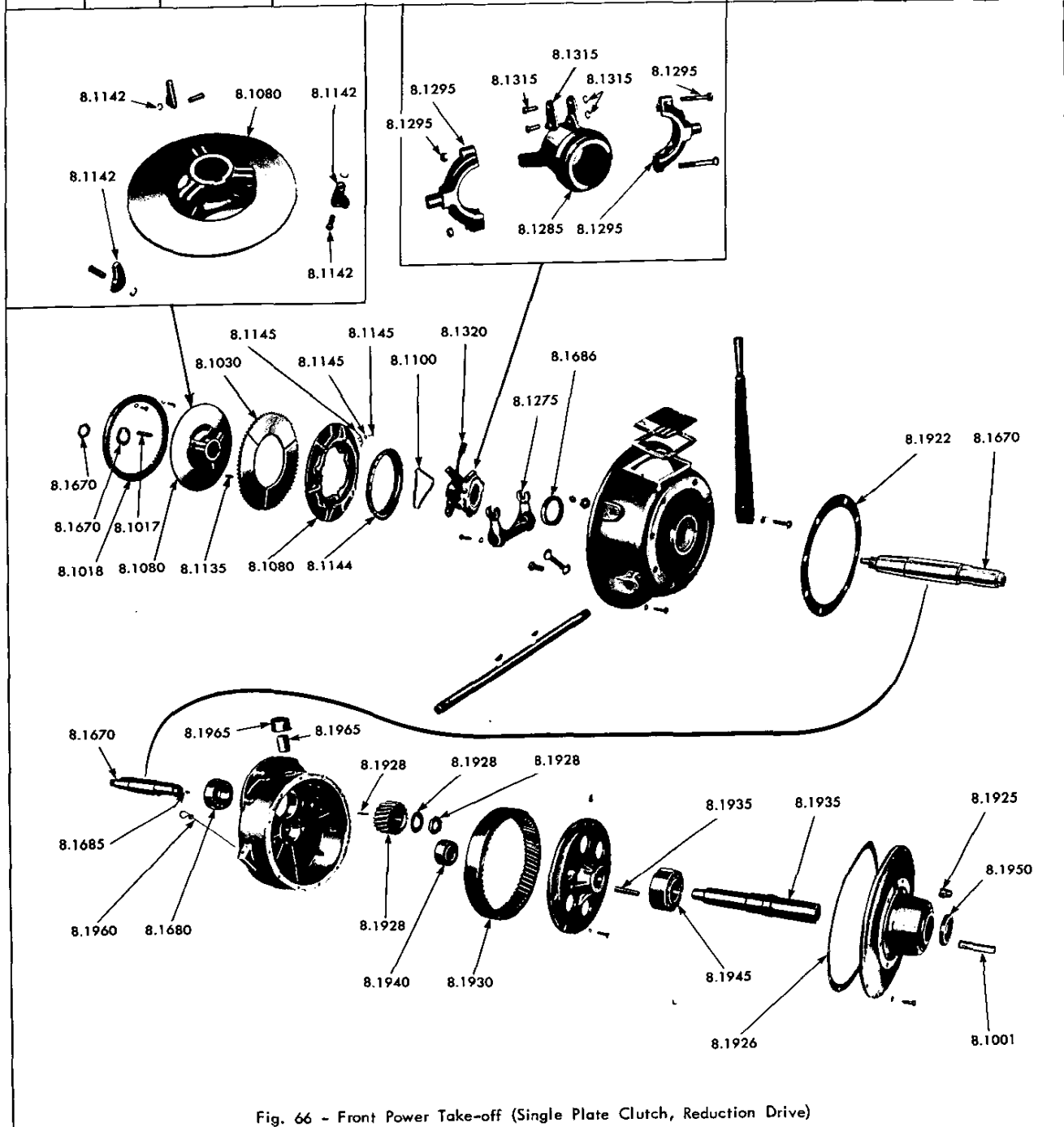
Fig. 65 - Front Power Take-off (Single Plate Clutch)

67	8.1450	954422	Bearing, clutch pilot (11 1/2") .....	1	1	1	
67	8.1450	7450574	Bearing, clutch pilot (14") .....		1	1	1
67	8.1460	5167276	Spacer, clutch pilot bearing (8") .....	1	1	1	
-	-	6768943	Adaptor, torque converter disconnect clutch drive .....		1		
65	8.1670	5192487	Shaft, clutch drive (8") .....	1	1	1	
66	8.1670	5193056	Shaft, clutch drive (11 1/2") .....	1	1	1	
63,64	8.1670	5194572	Shaft, clutch drive (14") .....	1	1	1	
-	-	5195466	Shaft, clutch drive (18" single plate clutch) .....		1		
-	-	5195471	Shaft, clutch drive (18" double plate clutch, long shaft) .....		1	1	
-	-	5195469	Shaft, clutch drive (18" double plate clutch, short shaft) .....		1	1	1
65	8.1670	5192490	Nut, shaft (8") .....	1	1	1	
66	8.1670	5192153	Nut, shaft (11 1/2") .....	1	1	1	
63,64	8.1670	5192124	Nut, shaft (14") .....	1	1	1	
-	-	5193778	Nut, shaft (18") .....		1	1	1
65	8.1670	5192491	Lockwasher, shaft (8") .....	1	1	1	
66	8.1670	5192154	Lockwasher, shaft (11 1/2") .....	1	1	1	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
63,64	8.1670	5192840	Lockwasher, shaft (14") .....	1	1	1	1
-	-	5194259	Lockwasher, shaft (18") .....		1	1	
65	8.1680	432777	Cup, clutch drive shaft bearing (8") .....	2	2	2	
65	8.1680	443858	Cone, clutch drive shaft bearing (8") .....	2	2	2	
66	8.1680	954363	Bearing, clutch drive shaft (11 1/2") .....	1	1	1	
63	8.1680	187313	Cup, clutch drive shaft bearing (14") .....	2	2	2	
63	8.1680	441295	Cone, clutch drive shaft bearing (14") .....	2	2	2	





# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	107364	Cup, clutch drive shaft bearing (18") .....		2	2	2
-	-	455474	Cone, clutch drive shaft bearing (18") .....		2	2	2
63	8.1685	119512	Fitting, 1/8" lube (drive shaft bearing) .....	1	1	1	
66	8.1686	5193122	Seal, clutch drive shaft bearing grease (11 1/2") .....	1	1	1	
65	8.1690	5192492	Retainer, clutch drive shaft bearing (8") .....	1	1	1	
63	8.1690	5193776	Retainer, clutch drive shaft bearing (18") .....				1
65	8.1700	3223379	Lock, clutch drive shaft bearing .....	1	1	1	1
65	8.1700	106973	Bolt, 5/16"-18 x 1/2" hex. hd. ....	1	1	1	1
65	8.1700	103320	Lockwasher, 5/16" .....	1	1	1	1
67	8.1900	5123172	Housing, front power take-off adaptor .....	1	1		
67	8.1900	5117491	Housing, front power take-off adaptor .....			1	
67	8.1900	186612	Bolt, 3/8"-16 x 1 3/8" hex. hd. (to front cover) .....	2	2		
67	8.1900	179848	Bolt, 3/8"-16 x 2 1/4" hex. hd. ....			2	
67	8.1900	9409914	Bolt, 3/8"-16 x 4 1/4" hex. hd. ....	2	2		
67	8.1900	190770	Bolt, 1/2"-13 x 3 1/4" hex. hd. (to block) .....			6	
67	8.1900	190256	Bolt, 1/2"-13 x 4 1/2" hex. hd. (to front cover) .....	4	4		
67	8.1900	103321	Lockwasher, 3/8" .....	4	4	2	
67	8.1900	103323	Lockwasher, 1/2" .....	4	4	6	
67	8.1901	5121714	Gasket, power take-off adaptor housing (8" and 11 1/2") .....			1	
67	8.1902	5151392	Seal, power take-off adaptor housing oil .....			1	
67	8.1905	5167265	Adaptor, power take-off to clutch (8") .....	1	1	1	
67	8.1905	5167291	Adaptor, power take-off to clutch (11 1/2") .....	1	1	1	
67	8.1905	5157244	Bolt, power take-off to clutch .....	6	6	6	
-	-	103321	Lockwasher, 3/8" .....	6	6	6	
67	8.1910	5167273	Flange Assy., power take-off coupling (8" and 11 1/2") .....	1	1	1	
67	8.1910	5153623	Bolt, coupling flange to crankshaft .....	1	1	1	
67	8.1910	5157930	Washer, coupling flange to crankshaft .....	1	1	1	
67	8.1910	117982	Key, 3/8" x 1 1/4" woodruff .....	2	2	2	
-	-	5187760	Spacer, power take-off coupling flange (11 1/2") .....	1	1	1	
66	8.1922	5193054	Gasket, reduction gear housing (11 1/2") .....	1	1	1	
66	8.1926	5193062	Gasket, reduction gear cover plate (11 1/2") .....	1	1	1	
66	8.1928	5193057	Gear, reduction gear drive (11 1/2") .....	1	1	1	
66	8.1928	5193065	Key (3/8" x 3/8" x 1 3/4") (11 1/2") .....	1	1	1	
66	8.1928	5193058	Washer, reduction gear (11 1/2") .....	1	1	1	
66	8.1928	5192153	Nut, reduction gear (11 1/2") .....	1	1	1	
66	8.1930	5195408	Gear, reduction gear driven (11 1/2") .....	1	1	1	
66	8.1930	5193072	Key, (5/8" x 5/8" x 3 1/4") (11 1/2") .....	1	1	1	
-	-	5195404	Screw Set (1/2"-13 x 3/4") (11 1/2") .....	1	1	1	
66	8.1935	5195407	Shaft, reduction gear (11 1/2") .....	1	1	1	
66	8.1935	5190721	Key (1/2" x 1/2" x 2 3/8") (11 1/2") .....	1	1	1	
66	8.1940	905307	Bearing, reduction gear shaft pilot (11 1/2") .....	1	1	1	
66	8.1945	905311	Bearing, reduction gear shaft (11 1/2") .....	1	1	1	

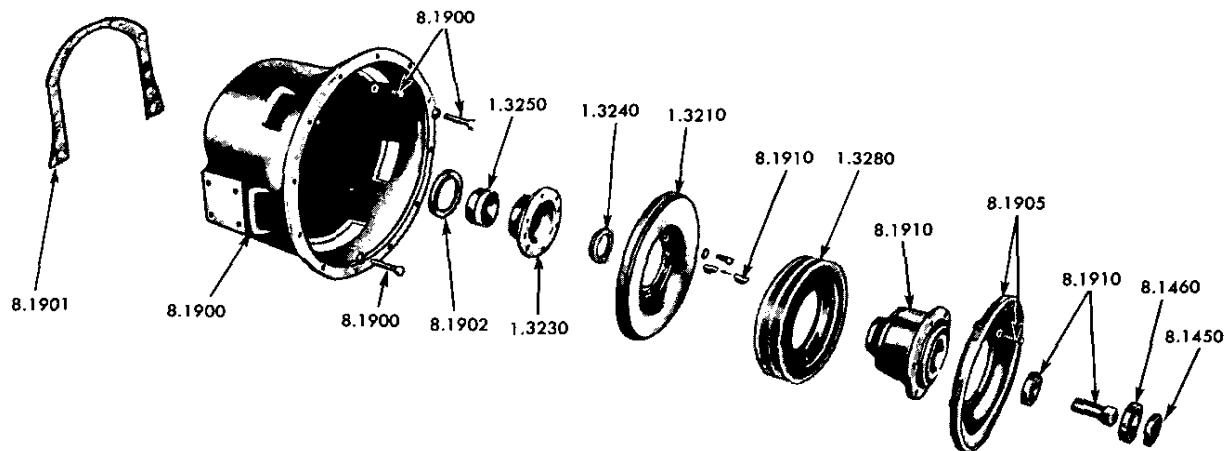


Fig. 67- Front Power Take-off Adaptor



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
66	8.1950	81370	Seal, reduction gear shaft oil (11 1/2") .....	1	1	1	
66	8.1960	5195405	Dipstick, reduction gear (11 1/2") .....	1	1	1	
66	8.1965	5193090	Pipe, reduction gear breather (11 1/2") .....	1	1	1	
52,66	8.1965	1528732	Cap, reduction gear breather (11 1/2") .....	1	1	1	
-	-	5123379	Filter Assy., power take-off (full flow) (includes items marked @)			1	
-	-	186619	Bolt, 3/8"-16 x 1 1/8" hex. hd. ....			4	
-	-	103321	Lockwasher, 3/8" .....			4	
42	4.2250	5573014	@Element, oil filter (includes gasket) .....			1	
36	4.2300	5571024	@Gasket, oil filter cover .....			1	
-	-	5126739	Hose, oil filter (flex. 34"L.) (pump to filter) .....			1	
-	-	5126738	Hose, oil filter (flex. 16"L.) (filter to power take-off) .....			1	
-	-	109429	Elbow, 1/2" flared tube 90° .....			2	
-	-	144034	Bushing, 3/4" x 1/2" red. pipe .....			2	
-	-	116487	Connector, 1/2" x 7/8" .....			1	
-	-	5177001	Clip, oil filter hose .....			1	
<b>TORQUE CONVERTER</b>							
<p>The GM Torqmatic Converter is offered in a wide variety of models to fit its many applications. While part numbers for these converters are not shown they may be interpreted by your GM Diesel dealer or distributor. It is necessary to furnish model number and type number from the Option Plate on your engine</p> <p style="text-align: center;">- 500 SERIES -</p>							
21,68	8.3001	-	Converter Assy., torqmatic (includes indented items) .....	1	1		
-	-	179867	Bolt, 7/16"-14 x 2 1/4" hex. hd. (to flywheel hsg.) .....	23	23		
-	-	9412014	Bolt, 9/16"-18 x 1 3/4" hex. hd. (torque converter to crankshaft) .....	6	6		
-	-	103322	Lockwasher, 7/16" .....	12	12		
-	-	6759354	Gasket and Seal Kit, torque converter (includes gaskets, seals and snap rings for a torque converter overhaul) .....	AR	AR		
69	8.3020	6768266	Sleeve, torque converter ground .....	1	1		
69	8.3020	6751377	Key, torque converter ground sleeve .....	1	1		
69	8.3020	141202	Pin, 1/4" x 1 1/8" dowel .....	1	1		
69	8.3030	6768481	Seal, torque converter ground sleeve retainer oil .....	1	1		
69	8.3045	6756761	Shaft, torque converter drive (TC, TCD - flanged) .....	1	1		
70	8.3045	6758126	Shaft, torque converter drive (TC, TCD - keyed) .....	1	1		
70	8.3045	6768471	Shaft, torque converter drive (TCA, TCDA - keyed) .....	1	1		
70	8.3045	6703152	Key, torque converter drive shaft (3/4" x 3/4" x 4") .....	1	1		
69	8.3047	6703135	Ring, torque converter drive shaft to converter housing piston (2 3/4" O.D.) .....	2	2		
69	8.3050	903312	Bearing, torque converter drive shaft main .....	1	1		
70	8.3050	457323	Cup, torque converter drive shaft main bearing .....	2	2		
70	8.3050	457325	Cone, torque converter drive shaft main bearing .....	2	2		
69	8.3055	6703154	Seal, torque converter drive shaft main bearing oil (3" I.D.) .....	1	1		
70	8.3055	6771232	Seal, torque converter drive shaft main bearing oil (3 1/2" I.D.) .....	1	1		
70	8.3055	6750434	Sleeve, torque converter oil seal .....	1	1		
-	-	6753204	Spacer, torque converter drive shaft main bearing (TCA, TCDA) .....	1	1		
70	8.3065	6750507	Shim, torque converter main bearing retainer (.003") .....	AR	AR		
70	8.3065	6750546	Shim, torque converter main bearing retainer (.010") .....	AR	AR		
70	8.3065	6750547	Shim, torque converter main bearing retainer (.031") .....	AR	AR		
69	8.3070	6750413	Yoke, torque converter drive shaft .....	1	1		
69	8.3070	271632	Bolt, 3/4" x 1 3/4" hex. hd. ....	1	1		
69	8.3070	103326	Lockwasher, 3/4" .....	1	1		
69	8.3071	6750451	Retainer, torque converter drive shaft flange .....	1	1		
70	8.3076	6753202	Gasket, torque converter bearing housing .....	1	1		
-	-	6752617	Gear, torque converter governor drive .....	1	1		
-	-	6752615	Shaft, torque converter governor drive .....	1	1		
-	-	6752614	Bushing, torque converter governor drive shaft .....	1	1		
-	-	3224773	Gasket, torque converter governor drive shaft adaptor .....	1	1		
-	-	954498	Bearing, torque converter governor drive shaft .....	1	1		



# GM DIESEL

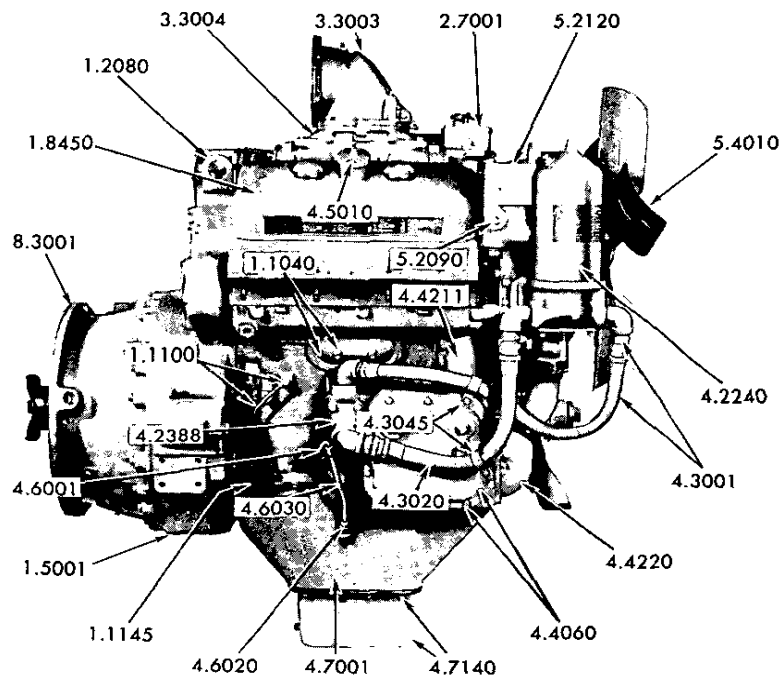
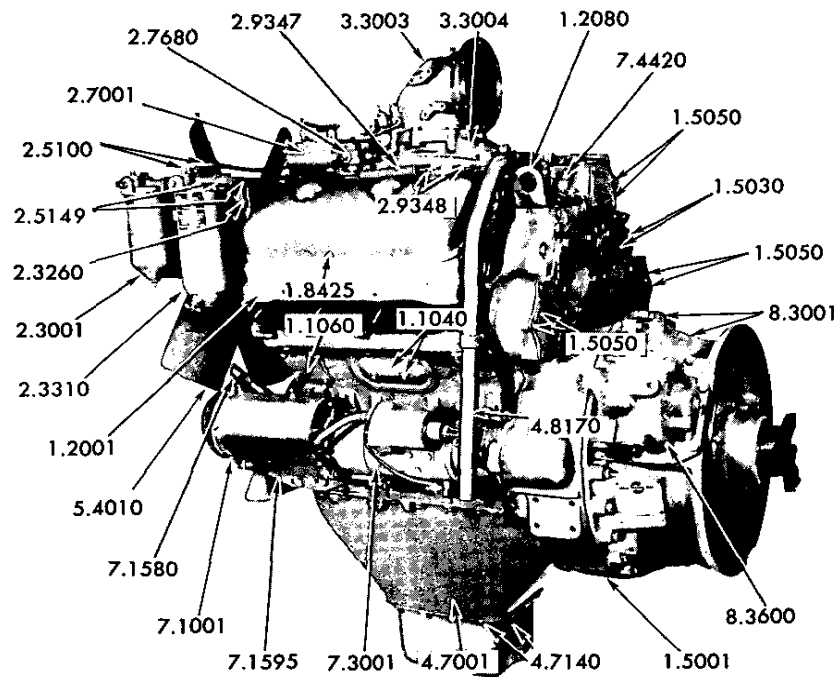


Fig. 68 - Typical Torque Converter Engine



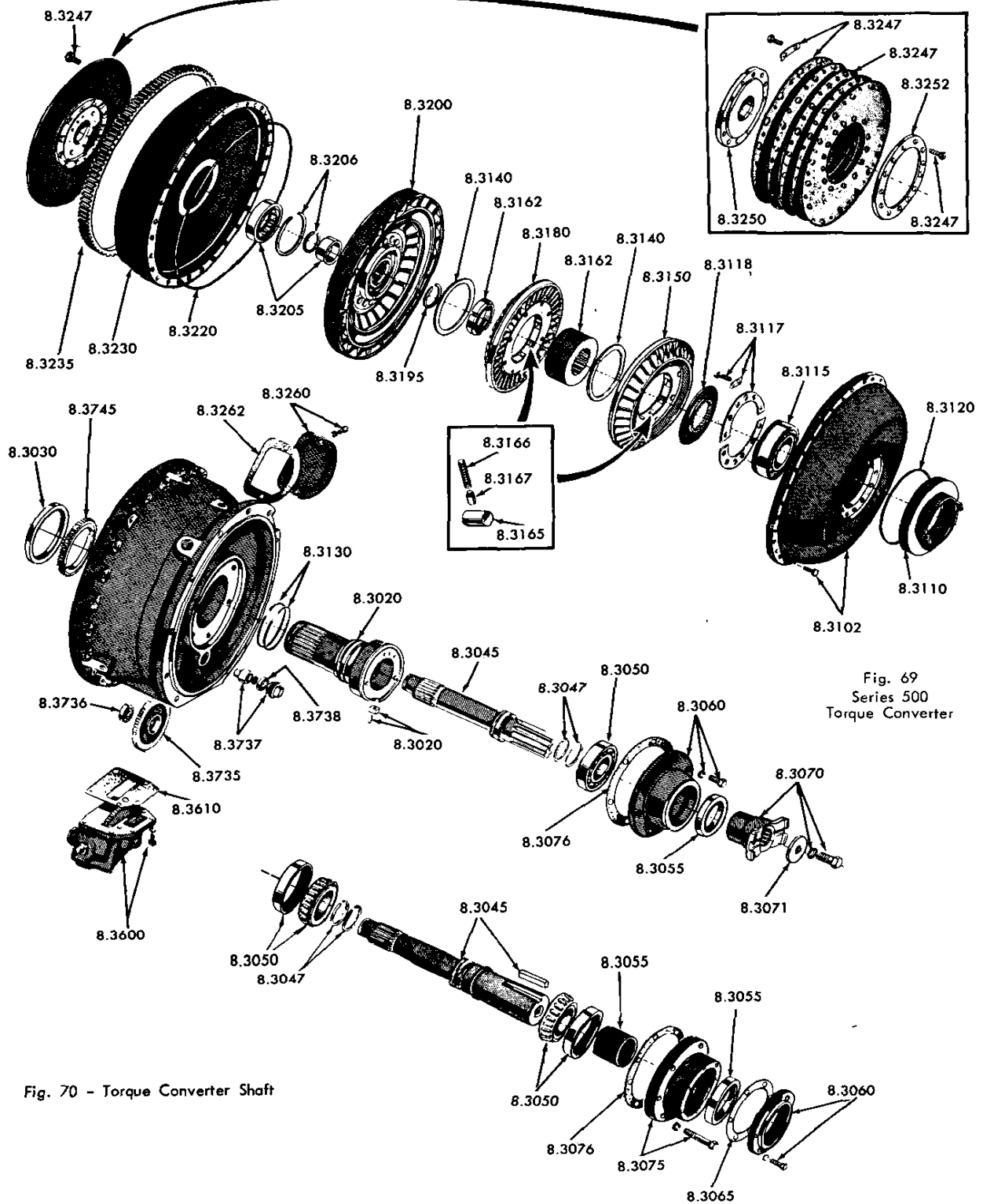


Fig. 69  
Series 500  
Torque Converter

Fig. 70 - Torque Converter Shaft



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	3224085	Sleeve, torque converter governor drive .....	1	1		
-	-	6751524	Spacer, torque converter governor drive shaft bearing .....	1	1		
69	8.3102	6756984	Pump, torque converter (540, 550 series) .....	1	1		
69	8.3102	6756589	Pump, torque converter (560, 570 series) .....	1	1		
69	8.3102	9409037	Bolt, 3/8"-24 x 1 1/4" hex. hd. ....	36	36		
69	8.3110	6756764	Hub, torque converter pump .....	1	1		
69	8.3115	904170	Bearing, torque converter pump hub .....	1	1		
69	8.3118	6756985	Plate, torque converter freewheel roller .....	1	1		
69	8.3120	6756642	Seal Ring, torque converter hub to pump (6 5/8" I.D.) .....	1	1		
69	8.3130	6759413	Ring, torque converter ground sleeve to pump piston (4 3/16" O.D.) .....	2	2		
69	8.3140	6758485	Washer, torque converter stator thrust .....	2	2		
69	8.3150	6768833	Stator, torque converter second .....	1	1		
69	8.3162	6756319	Race, torque converter freewheel roller .....	1	1		
69	8.3162	6756322	Nut, torque converter freewheel roller race lock .....	1	1		
69	8.3165	6769607	Roller, torque converter freewheel .....	16	16		
69	8.3166	6769469	Spring, torque converter freewheel roller .....	16	16		
69	8.3167	6754710	Pin, torque converter freewheel roller guide .....	16	16		
69	8.3180	6768831	Stator Assy., torque converter first (540, 560 series) .....	1	1		
69	8.3180	6768832	Stator Assy., torque converter first (550, 570 series) .....	1	1		
69	8.3195	6703059	Ring, torque converter turbine hub to drive shaft retaining snap..	1	1		
69	8.3200	6756408	Turbine, torque converter .....	1	1		
69	8.3205	127909	Bearing, torque converter drive shaft pilot .....	1	1		
69	8.3206	6760289	Ring, pilot bearing snap (outer race) .....	1	1		
69	8.3206	6750289	Ring, pilot bearing snap (inner race) .....	1	1		
69	8.3220	6703141	Seal Ring, torque converter pump to flywheel .....	1	1		
69	8.3320	6750187	Seal Ring, torque converter pump to flywheel .....	1	1		
64	8.3230	6768925	Flywheel Assy. (includes ring gear) .....	1	1		
64	8.3235	5184773	Ring Gear, flywheel .....	1	1		
69	8.3247	6750468	Disc, torque converter flexible coupling .....	4	6		
69	8.3247	6751516	Disc Assy., torque converter flexible coupling .....	1	1		
69	8.3247	9409056	Bolt, 1/2"-20 x 3/4" hex. hd. ....	24	24		
69	8.3250	6750467	Hub, torque converter flexible coupling .....	1	1		
69	8.3252	6753364	Plate, torque converter flexible coupling .....	1	1		
69	8.3260	6703138	Cover, torque converter housing .....	1	1		
69	8.3260	179837	Bolt, 3/8"-16 x 3/4" hex. hd. ....	2	2		
-	-	103321	Lockwasher, 3/8" .....	2	2		
69	8.3262	6750186	Gasket, torque converter housing cover .....	1	1		
69	8.3600	6759444 ▲	Pump Assy., torque converter pressure (includes items marked#)	1	1		
71	8.3600	186612	Bolt, 3/8"-16 x 1 3/8" hex. hd. ....	6	6		
-	-	103321	Lockwasher, 3/8" .....	6	6		
69,71	8.3610	6751733	Gasket, torque converter pressure pump .....	1	1		
71	8.3620	6756527	#Valve, torque converter pressure pump converter regulating ....	1	1	1	
71	8.3620	6770418	#Valve, torque converter pressure pump clutch regulating .....	1	1	1	
71	8.3625	6751410	#Cap, torque converter pressure pump relief valve .....	2	2	2	
71	8.3630	6756484	#Spring, torque converter pressure pump converter regulating valve .....	1	1	1	
71	8.3630	6770417	#Spring, torque converter pressure pump clutch regulating valve .....	1	1	1	
71	8.3635	142756	#Gasket, 1 1/4" copper .....	1	1	1	
71	8.3635	6756237	#Shim, torque converter pressure pump valve cap .....	AR	AR	AR	
71	8.3655	6770432	#Ring, torque converter pump shaft seal (1" O.D.) .....	1	1	1	
-	-	6754379	#Ring, torque converter pump shaft seal (1 1/4" I.D.) .....	1	1	1	
71	8.3658	6759437	#Sleeve, torque converter pressure pump bearing .....	1	1	1	
71	8.3665	6751382	#Bearing, torque converter pressure pump inner .....	2	2	2	
71	8.3670	6759436	#Shaft, torque converter pressure pump (with gear) .....	1	1	1	
71	8.3678	6751383	#Gear, torque converter pressure pump (driven) .....	1	1	1	
71	8.3678	148416	#Bearing, torque converter pressure pump driven gear .....	1	1	1	
71	8.3685	6751379	#Shaft, torque converter pressure pump driven gear .....	1	1	1	
71	8.3715	6759435	#Gasket, torque converter pressure pump .....	1	1	1	
69	8.3735	6772750	Gear Assy., torque converter pressure pump idler (includes bearing) .....	1	1		
69	8.3736	903304	Bearing, torque converter pressure pump idler gear .....	1	1		
69	8.3737	6752423	Shaft, torque converter pressure pump idler gear .....	1	1		
69	8.3737	6752414	Plug, torque converter pressure pump idler gear shaft .....	1	1		

▲ Used with 800-900 series also.



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
69	8.3738	6752415	Seal ring, torque converter pressure pump idler gear shaft (1.10" I.D.) .....	1	1		
69	8.3745	6751502	Gear, torque converter pressure pump drive .....	1	1		
71	8.3755	6751385	#Gear, torque converter pressure pump driving .....	1	1	1	
- 800 AND 900 SERIES -							
21,68	8.3001	-	Converter Assy., torqmatic (includes indented items) .....		1	1	
-	-	9412015	Bolt, 9/16"-18 x 2 1/2" hex. hd. (to crankshaft) .....		6	6	
72	8.3001	186646	Bolt, 1/2"-13 x 1 3/4" hex. hd. (to flywheel housing) .....		12	12	
-	-	103323	Lockwasher, 1/2" .....		12	12	
-	-	6756535	Gasket and Seal Kit, torque converter (contains the necessary seals, gaskets, and snap rings for a complete torque converter overhaul) .....		AR	AR	
72	8.3020	6752889	Sleeve, torque converter ground .....		1	1	
-	-	6751377	Key, torque converter ground sleeve .....		1	1	
-	-	141202	Pin, 1/4" x 1/8" dowel .....		1	1	
72	8.3030	5187281	Seal, torque converter ground sleeve retainer oil .....		1	1	
72	8.3045	6750530	Shaft, torque converter drive (TC - keyed) .....		1	1	
-	-	6750584	Shaft, torque converter drive (TC - flanged) .....		1	1	
72	8.3045	6750198	Key, torque converter drive shaft (1" x 1" x 5 1/2") .....		1	1	
-	-	141217	Pin, 5/16" x 5/8" dowel .....		1	1	
72	8.3047	6703060	Ring, torque converter drive shaft to converter housing piston (3 1/2" O.D.) .....		2	2	
72	8.3050	119272	Cup, torque converter drive shaft main bearing .....		2	2	
72	8.3050	119273	Cone, torque converter drive shaft main bearing .....		2	2	
72	8.3055	6750522	Seal, torque converter drive shaft main bearing oil (4 1/2" I.D.) .....		1	1	
72	8.3055	6750534	Sleeve, torque converter oil seal (2" long) .....		1	1	
72	8.3065	6750548	Shim, torque converter main bearing retainer (.003") .....		AR	AR	
72	8.3065	6750549	Shim, torque converter main bearing retainer (.010") .....		AR	AR	
72	8.3065	6750551	Shim, torque converter main bearing retainer (.031") .....		AR	AR	
72	8.3070	6752520	Flange, drive shaft .....		1	1	

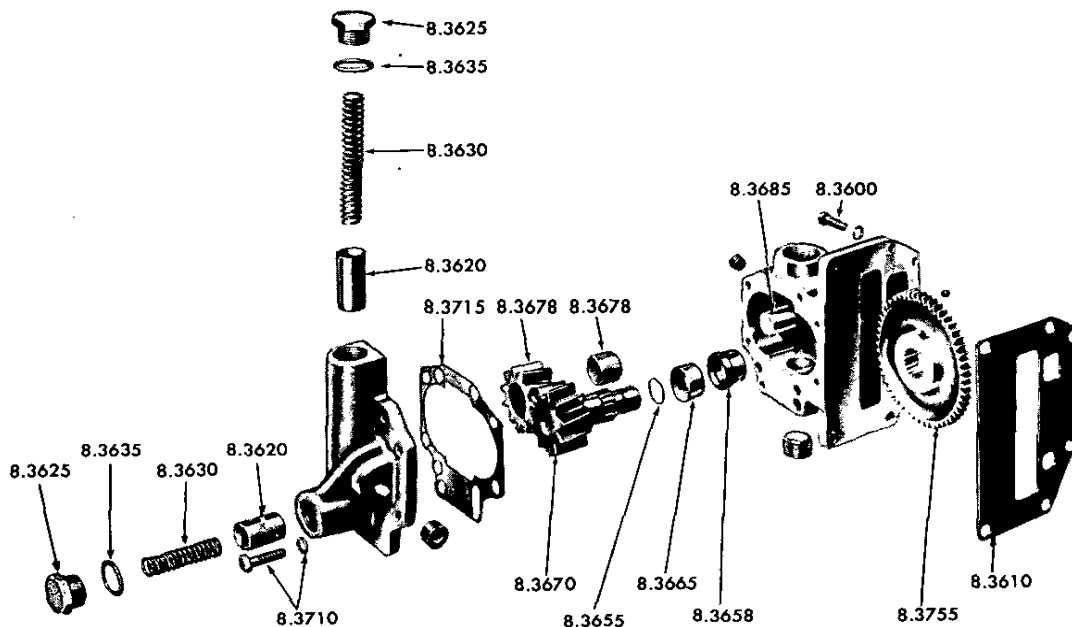


Fig. 71 - Torque Converter Pressure Pump



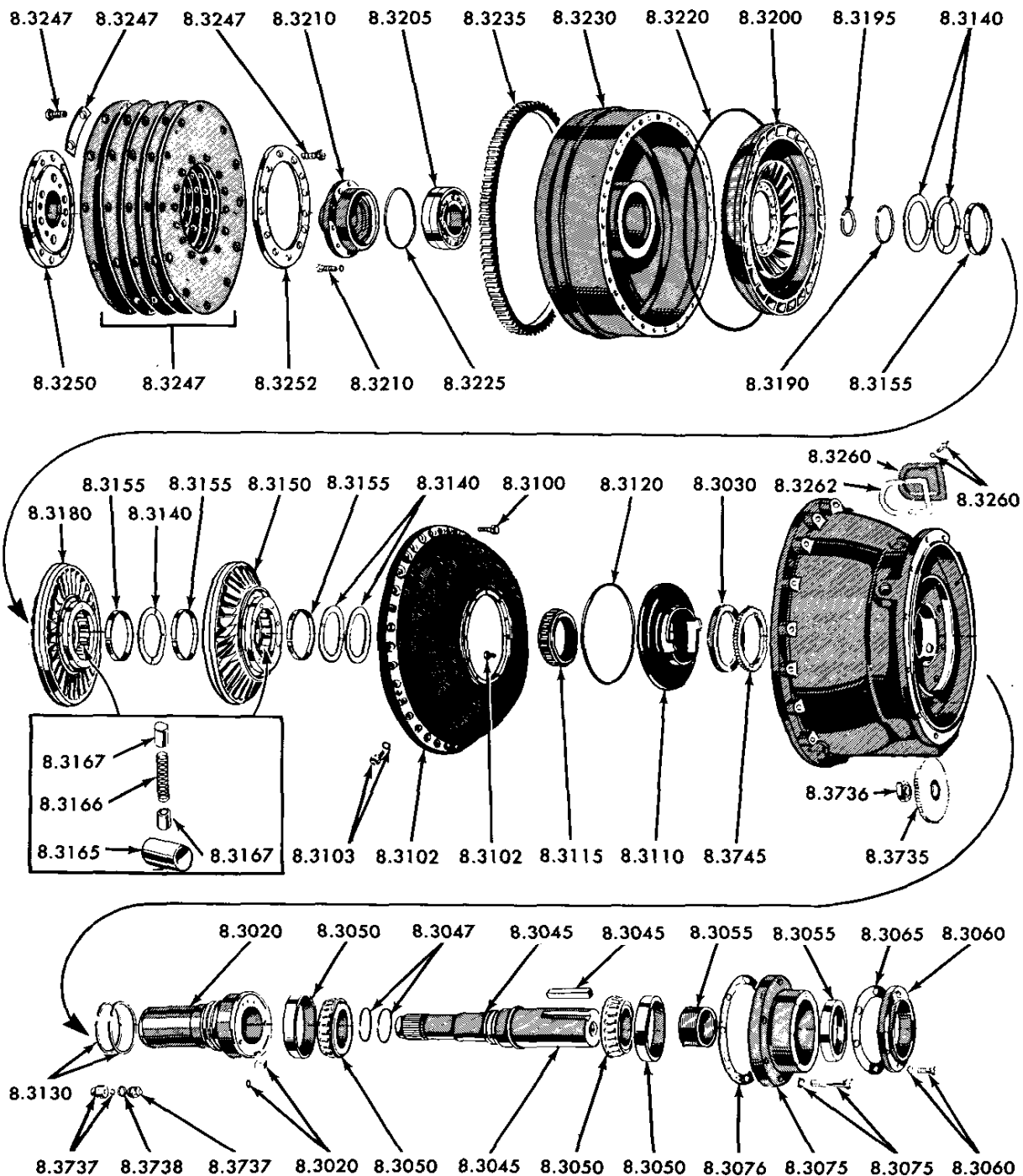


Fig. 72 - Series 800 and 900 Torque Converters



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
72	8.3070	179994	Bolt, 1" x 16 x 1 3/4" .....		1	1	
-	-	121326	Lockwasher, 1" .....		1	1	
-	-	6750234	Retainer, drive shaft flange .....		1	1	
72	8.3076	6753230	Gasket, torque converter bearing housing .....		1	1	
72	8.3100	6752215	Pump and Hub Assy., torque converter (includes next 7 items for 800 series) .....		1	1	
72	8.3100	6751949	Pump and Hub Assy., torque converter (includes next 7 items for 900 series) .....		1	1	
72	8.3102	6752935	Pump Assy., torque converter (includes seal ring and bolt) (800 series) .....		1	1	
72	8.3102	6752402	Pump Assy., torque converter (includes seal ring and bolt) (900 series) .....		1	1	
72	8.3102	9409009	Bolt, 1/4"-28 x 1" hex. hd. lock .....	12	12		
-	-	6752895	Seal Ring, torque converter oil drain plug (3/8" I.D.) .....	2	2		
72	8.3103	6758614	Bolt, 3/8"-16 x 1/2" (oil drain plug) .....	2	2		
72	8.3110	6751966	Hub, torque converter pump .....	1	1		
72	8.3115	7450150	Bearing, torque converter pump hub .....	1	1		
72	8.3120	6765573	Seal Ring, torque converter hub to pump (8 7/16" I.D.) .....	1	1		
72	8.3130	6750183	Ring, torque converter ground sleeve to pump piston (5" O.D.) ..	2	2		
72	8.3140	6750170	Washer, torque converter stator (thrust) .....	3	3		
72	8.3140	6750212	Washer, torque converter stator (plain) .....	1	1		
72	8.3150	6752398	Stator Assy., torque converter second (includes bushing) .....	1	1		
-	-	6752585	Bushing, torque converter stator hub .....	4	4		
72	8.3165	6750161	Roller, torque converter freewheel .....	16	16		
72	8.3166	6751967	Spring, torque converter freewheel roller .....	16	16		
72	8.3167	6750160	Cup, torque converter freewheel spring .....	32	32		
72	8.3180	6751044	Stator Assy., torque converter first (includes bushing) .....	1	1		
-	-	6752585	Bushing, torque converter stator hub .....	4	4		
72	8.3190	6750188	Ring, torque converter stator to converter sleeve snap .....	1	1		
72	8.3195	6750054	Ring, torque converter turbine hub to drive shaft retaining snap (2 3/4" I.D.) .....	1	1		
72	8.3200	6769147	Turbine, torque converter .....	1	1		
72	8.3205	6752471	Bearing, torque converter drive shaft pilot .....	1	1		
72	8.3210	6750525	Retainer, torque converter pilot bearing .....	1	1		
-	-	181370	Bolt, 3/8"-24 x 1 1/4" hex. hd. ....	6	6		
-	-	103321	Lockwasher, 3/8" .....	6	6		
72	8.3215	6751497	Washer, torque converter pilot bearing retainer (3" O.D. x 1/2" thick) .....	1	1		
72	8.3215	6751427	Washer, torque converter pilot bearing retainer lock (2" O.D.) ..	1	1		
72	8.3215	271699	Bolt, 1"-8 x 2" hex. hd. ....	1	1		
72	8.3320	6750187	Seal Ring, torque converter pump to flywheel (19" I.D.) .....	1	1		
72	8.3225	6703224	Seal Ring, torque converter flywheel to pilot bearing retainer ..	1	1		
72	8.8330	6770655	Flywheel Assy. (includes ring gear) .....	1	1		
72	8.3235	5184773	Ring, Gear, flywheel .....	1	1		
72	8.3247	6751516	Disc Assy., torque converter flexible coupling .....	1	1		
-	-	6750468	Disc, torque converter flexible coupling .....	6	6		
72	8.3247	9409056	Bolt, 1/2"-20 x 3/4" hex. hd. ....	20	20		
72	8.3250	6770493	Hub, torque converter flexible coupling .....	1	1		
72	8.3252	6753364	Plate, torque converter flexible coupling .....	1	1		
72	8.3260	6703138	Cover, torque converter housing .....	1	1		
72	8.3260	179837	Bolt, 3/8"-16 x 7/8" hex. hd. ....	2	2		
72	8.3260	103321	Lockwasher, 3/8" .....	2	2		
72	8.3262	6750186	Gasket, torque converter housing cover .....	1	1		
69	8.3600	6759444	Pump Assy., torque converter pressure (see P. 89 for breakdown)	1	1		
71	8.3600	186612	Bolt, 3/8"-16 x 1 3/8" hex. hd. ....	6	6		
71	8.3600	103321	Lockwasher, 3/8" .....	6	6		
69	8.3610	6751733	Gasket, torque converter pressure pump .....	1	1		
72	8.3735	6752378	Gear Assy., torque converter pressure pump idler (includes bearing)	1	1		
72	8.3736	903304	Bearing, torque converter pressure pump idler gear .....	1	1		
72	8.3737	6752423	Shaft, torque converter pressure pump idler gear .....	1	1		
72	8.3737	6752414	Plug, torque converter pressure pump idler gear shaft .....	1	1		
72	8.3738	6752415	Seal Ring, torque converter pressure pump idler gear shaft (1.10" I.D.) .....	1	1		
72	8.3845	6751375	Gear, torque converter pressure pump drive .....	1	1		



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
			<b>TORQUE CONVERTER LINES</b>				
			The proper torque converter lines for your engine can be interpreted by your GM Diesel dealer or distributor. Furnish him model number and type number (if shown) on the Option Plate on your engine.				
-	-	5187327	Strainer Assy., converter oil (includes indented items) .....		1	1	
-	-	5193849	Element, converter oil strainer .....		1	1	
-	-	5193851	Cap, converter oil strainer .....		1	1	
-	-	144017	Plug, 1 1/4" pipe .....		1	1	
-	-	5126732	Tube, converter tank to pump (flex.) (1 1/8" I.D. x 57 9/16" L.) .....	1			
-	-	5124770	Tube, converter tank to pump (flex.) (1 1/8" I.D. x 62 7/16" L.) .....		1		
-	-	5115762	Tube, converter tank to pump (flex.) (1 1/8" I.D. x 72 27/32" L.) ....		1	1	
-	-	5115759	Tube, converter tank to pump (flex.) (1 1/8" I.D. x 83 11/32" L.) ....			1	
-	-	5179958	Adaptor, converter tank to pump tube .....	2	2	2	
-	-	111145	Elbow, 1 1/4" street 45° .....	1	1	1	
-	-	137971	Elbow, 1 1/2" pipe 90° .....	1	1	1	
-	-	219359	Nipple, 1 1/4" x 3" pipe .....	1	1	1	
-	-	5158779	Clip, converter tank to pump tube .....	1	1	1	
-	-	5181531	Bracket, converter tank to pump tube clip .....	1	1	1	
-	-	181595	Bolt, 5/16"-24 x 3/4" hex. hd. ....	1	1	1	
-	-	5177697	Tube, oil cooler to converter tank (flex.) (5/8" I.D. x 19 5/16" L.)..	1			
-	-	5112421	Tube, oil cooler to converter tank (flex.) (5/8" I.D. x 25 11/16" L.) .		1		
-	-	5120510	Tube, oil cooler to converter tank (flex.) (5/8" I.D. x 30 5/8" L.) ....			1	
-	-	5176705	Elbow (3/4"-90°) oil cooler to converter tank tube .....	1	1	1	
-	-	128003	Bushing, 1" x 3/4" red. pipe .....	2	2	2	
-	-	5177697	Tube, converter to oil filter (flex.) (5/8" I.D. x 19 5/16" L.) .....	1	1	1	
-	-	5177664	Connector (3/4") converter to oil filter tube .....	1	1	1	
-	-	5120683	Tube, filter to oil cooler (flex.) (5/8" I.D. x 24 3/16" L.) .....	1			
-	-	5178023	Tube, filter to oil cooler (flex.) (5/8" I.D. x 28 3/16" L.) .....		1	1	
-	-	5120028	Tube, filter to oil cooler (flex.) (5/8" I.D. x 40 3/32" L.) .....		1		
-	-	5183095	Tube, filter to oil cooler (flex.) (5/8" I.D. x 52 1/32" L.) .....			1	
-	-	5186451	Tube, filter to oil cooler (flex.) (5/8" I.D. x 60 27/32" L.) .....			1	
-	-	5127120	Adaptor, filter to oil cooler tube .....			1	
-	-	5124812	Gasket, filter to oil cooler adaptor .....			1	
-	-	5176705	Elbow (3/4") filter oil cooler tube .....	1	1	1	
-	-	140798	Elbow, 3/4" street 45° .....	1	1	1	
-	-	128003	Bushing, 1" x 3/4" red. pipe .....	1	1	1	
-	-	179871	Bolt, 7/16"-14 x 3 1/4" hex. hd. ....			4	
-	-	117063	Nut, 7/16"-14 hex. ....			4	
-	-	5126731	Tube, converter to tank (drain) (flex.) (1/2" I.D. x 41" L.) .....	1			
-	-	5124769	Tube, converter to tank (drain) (flex.) (1/2" I.D. x 49 1/2" L.) .....		1		
-	-	5124768	Tube, converter to tank (drain) (flex.) (1/2" I.D. x 61" L.) .....		1	1	
-	-	5129157	Tube, converter to tank (drain) (flex.) (1/2" I.D. x 73" L.) .....			1	
-	-	5120020	Fitting, swivel .....	2	2	2	
-	-	9402826	Elbow (1/2" tube x 3/8" P.T.) (45°) .....	2	2	2	
-	-	190723	Nipple, 3/4" x 2 1/2" pipe .....	1	1		
-	-	189775	Tee, 3/4" x 1/2" x 3/4" pipe .....	1	1		
-	-	5177331	Bracket, converter to tank tube clip .....	1	1	2	
-	-	5151189	Clip, converter to tank tube .....	1	1	2	
-	-	181595	Bolt, 5/16"-24 x 3/4" hex. ....	1	1	2	
-	-	5118621	Pipe, converter oil tank filler .....	1	1	1	
-	-	111145	Elbow, 1 1/4" street 45° .....	1	1	1	
-	-	1528732	Cap Assy., converter oil tank breather .....	1	1	1	
-	-	5124159	Dipstick, converter oil tank .....	1	1	1	
-	-	5153992	Tube Assy., converter oil tank dipstick .....	1	1	1	
-	-	5151430	Guide, converter oil tank dipstick .....	1	1	1	
-	-	5187241	Cover, oil tank hand hole .....	1	1	1	
-	-	179839	Bolt, 3/8"-16 x 1" hex. hd. ....	6	6	6	
-	-	103321	Lockwasher, 3/8" .....	6	6	6	
-	-	5187243	Gasket, oil tank hand hole cover .....	1	1	1	



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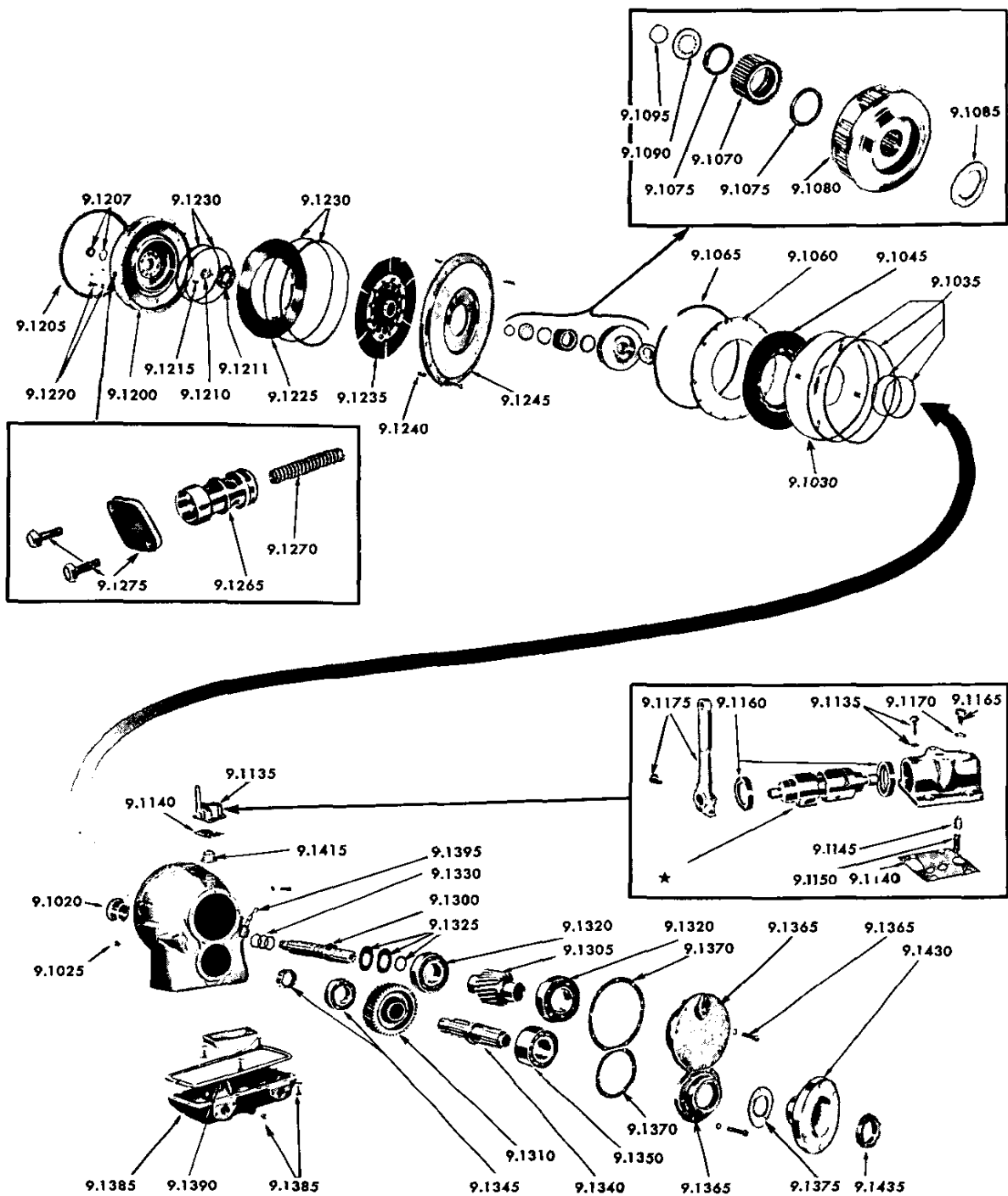
FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5123379	Filter Assy., converter oil (includes items marked#)	1	1	1	
-	-	179839	Bolt, 3/8"-16 x 1" hex. hd.	3	3	3	
-	-	103321	Lockwasher, 3/8"	4	4	4	
42	4.2250	5573014	#Element, converter oil filter (includes cover gasket)	1	1	1	
42	4.2300	5571024	#Gasket, oil filter cover	1	1	1	
-	-	5126813	Bracket, converter oil filter mounting	1	1	1	
-	-	181433	Bolt, 1/2"-20 x 1 3/4" hex. hd.	2	2	2	
-	-	5126814	Support, oil filter mounting bracket	1	1		
-	-	5126815	Support, oil filter mounting bracket		1	1	
<b>HYDRAULIC MARINE GEAR</b>							
<p>Marine gears are available in several ratios and modifications. By furnishing your GM Diesel dealer or distributor with the identifying type number shown on the Option Plate he can properly interpret your requirements.</p>							
4	9.1001	-	Gear Assy., marine (1:1, 1.5:1, 2:1, 3:1, 3.75:1 and 4.5:1 ratio) (includes indented items)	1	1		
33,52	9.1001	-	Gear Assy., marine (2:1, 3:1, 4.15:1 and 6:1 ratio)			1	
-	-	-	Gear Assy., marine (2.17:1, 3.07:1, 4.11:1 and 4.96:1 ratio)				1
-	-	186619	Bolt, 3/8"-16 x 1 1/8" hex. hd.				12
-	-	186612	Bolt, 3/8"-16 x 1 3/8" hex. hd.	12	12		
-	-	106337	Bolt, 7/16"-14 x 1 3/8" hex. hd.			12	12
-	-	442733	Bolt, 1/2"-13 x 1 1/4" hex. hd.			8	
-	-	103321	Lockwasher, 3/8"	12	12		12
-	-	103322	Lockwasher, 7/16"			12	12
-	-	103323	Lockwasher, 1/2"			8	
-	-	5178041	Seal Ring, marine gear housing adaptor oil	1	1		
-	-	5178869	Retainer, marine gear housing adaptor oil seal ring	1	1		
-	-	5170683	Gasket, marine gear housing	1	1		
-	-	5193753	Gasket Kit, hydraulic marine gear overhaul (includes the necessary gaskets for a gear overhaul)	AR	AR		
73	9.1020	6700509	Sleeve, marine gear housing oil transfer	1	1		
73	9.1025	6701077	Pin, marine gear housing clutch drive	3	3		
73	9.1030	6700545	Piston, reverse clutch	1	1		
73	9.1035	5192289	Seal Kit, reverse clutch piston (consists of one each large seal and expander and one each small seal and expander)	1	1		
-	-	6751008	Gear, reverse ring	1	1		
73	9.1045	6751597	Plate, reverse clutch	1	1		
-	-	6701070	Ring, reverse clutch plate snap	1	1		
-	9.1055	6701093	Spring, reverse clutch release	16	16		
73	9.1060	6701049	Plate, reverse clutch reaction	1	1		
-	-	454512	Pin, 3/16" x 3/4" dowel	3	3		
73	9.1065	6700119	Ring, clutch reaction plate snap	1	1		
73	9.1070	6751588	Gear, sun	1	1		
73	9.1075	6701096	Washer, sun gear thrust	2	2		
73	9.1080	6750772	Gear Assy., planetary (marked R.S.)	1	1		
73	9.1080	6750227	Gear Assy., planetary (marked L.P.)	1	1		
73	9.1085	6770522	Washer, planetary gear thrust	1	1		
-	-	5194835	Repair Kit, planetary gear	1	1		
73	9.1090	6700169	Washer, planetary gear retaining	1	1		
73	9.1095	6702989	Ring, planetary gear snap	1	1		
73	9.1135	6700960	Valve Assy., selector (includes items marked @)	1	1		
73	9.1135	186625	Bolt, 5/16"-18 x 7/8" hex. hd.	4	4		
73	9.1135	103320	Lockwasher, 5/16"	4	4		
73	9.1140	6700965	@Gasket, selector valve housing	1	1		
73	9.1145	6700233	@Poppet, selector valve	1	1		
73	9.1150	6700181	@Spring, selector valve poppet	1	1		
73	9.1160	6700846	@Seal, selector valve oil	2	2		
73	9.1165	6700173	@Screw, selector valve locating	1	1		
73	9.1170	5155596	@Washer, 5/16" flat, copper	1	1		
73	9.1175	6700228	Lever, selector valve operating	1	1		



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FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
73	9.1175	442603	Bolt, 1/4"-20 x 3/4" hex. hd. ....	1	1		
73	9.1200	5176183	Flywheel Assy., reverse gear (includes ring gear, oil seal, snap ring, bearing, dump valve, emergency release bolt and nut) .....	1	1		
-	-	9411631	Bolt, flywheel to crankshaft (9/16"-18 x 2 3/4") .....	6	6		
73	9.1205	5188030	Gear, reverse gear flywheel ring .....	1	1		
73	9.1207	5173384	Seal, flywheel oil .....	1	1		
73	9.1207	9413380	Ring, flywheel oil seal snap .....	1	1		
73	9.1210	954420	Bearing, flywheel pilot .....	1	1		
73	9.1211	5173434	Retainer, pilot bearing .....	1	1		
73	9.1215	6701077	Pin, forward clutch emergency release .....	3	3		
73	9.1220	5171411	Bolt, forward clutch emergency release .....	6	6		
73	9.1220	123550	Nut, 1/2" x 13 hex. ....	6	6		
73	9.1225	5171420	Piston, forward clutch .....	1	1		
73	9.1230	5192288	Seal Kit, forward clutch piston (consists of one inner seal and expander and one outer seal and expander) .....	1	1		
73	9.1235	5182509	Plate Assy., forward clutch (includes spring 2007110) .....	1	1		
73	9.1240	6701093	Spring, forward clutch release .....	16	16		
73	9.1245	5182407	Plate, forward clutch reaction .....	1	1		
-	-	186628	Bolt, 3/8"-16 x 1 1/2" hex. hd. ....	16	16		
73	9.1265	5171416	Valve, forward clutch dump .....	1	1		
73	9.1270	5171417	Spring, forward clutch dump valve .....	1	1		
73	9.1275	5171414	Cover, forward clutch dump valve spring .....	1	1		
-	-	5171415	Gasket, forward clutch dump valve spring cover .....	1	1		
73	9.1300	6772039	Shaft Assy., reduction gear pinion drive .....	1	1		
73	9.1305	6751934	Pinion, reduction gear (1:1 ratio) .....	1	1		
73	9.1305	6751900	Pinion, reduction gear (1.5:1 ratio) .....	1	1		
73	9.1305	6751903	Pinion, reduction gear (2:1 ratio) .....	1	1		
73	9.1305	6751916	Pinion, reduction gear (3:1 ratio) .....	1	1		
73	9.1305	6752952	Pinion, reduction gear (3.75:1 ratio) .....	1	1		
73	9.1305	6751918	Pinion, reduction gear (4.5:1 ratio) .....	1	1		
73	9.1310	6750756	Gear, reduction (1:1 ratio) .....	1	1		
73	9.1310	6751899	Gear, reduction (1.5:1 ratio) .....	1	1		
73	9.1310	6751902	Gear, reduction (2:1 ratio) .....	1	1		
73	9.1310	6700199	Gear, reduction (3:1 ratio) .....	1	1		
73	9.1310	6752953	Gear, reduction (3.75:1 ratio) .....	1	1		
73	9.1310	6700201	Gear, reduction (4.5:1 ratio) .....	1	1		
73	9.1320	901314	Bearing, reduction gear pinion .....	2	2		
73	9.1325	6751912	Washer, reduction gear drive shaft thrust (steel) .....	1	1		
73	9.1325	6751913	Washer, reduction gear drive shaft thrust (bronze) .....	1	1		
73	9.1325	6702989	Ring, snap .....	1	1		
73	9.1330	6700508	Ring, reduction gear drive shaft oil seal .....	3	3		
73	9.1340	6771998	Shaft, reduction gear output .....	1	1		
73	9.1345	7450134	Bearing, reduction gear output shaft pilot .....	1	1		
73	9.1345	6772000	Locknut, output shaft pilot bearing .....	1	1		
73	9.1350	904782	Bearing Set, reduction gear output shaft thrust .....	1	1		
73	9.1365	6751908	Cover, pinion shaft bearing (upper) .....	1	1		
73	9.1365	6759849	Cover, output shaft bearing (lower) .....	1	1		
73	9.1365	186622	Bolt, 3/8"-16 x 1 1/4" hex. hd. ....	9	9		
73	9.1365	180152	Bolt, 7/16"-14 x 1 7/8" hex. hd. ....	9	9		
73	9.1370	6751909	Gasket, pinion shaft bearing cover .....	1	1		
73	9.1370	6759848	Gasket, output shaft bearing cover .....	1	1		
73	9.1375	6700157	Seal, reduction gear bearing oil .....	2	2		
73	9.1385	6750767	Sump, reduction gear oil .....	1	1		
73	9.1385	186622	Bolt, 3/8"-16 x 1 1/4" hex. hd. ....	12	12		
-	-	103380	Plug, 1/2" pipe .....	1	1		
73	9.1390	6750763	Gasket, reduction gear oil sump .....	1	1		
73	-	6700237	Dipstick, reduction gear .....	1	1		
-	-	6700236	Guide, reduction gear dipstick .....	1	1		
-	-	6752353	Bushing, reduction gear dipstick .....	1	1		
-	-	5150475	Gasket, reduction gear dipstick .....	1	1		
4,73	9.1415	1528732	Cap, reduction gear oil filler .....	1	1		
73	9.1430	6751915	Flange, propeller drive .....	1	1		
73	9.1435	6771998	Nut, propeller drive flange .....	1	1		





★NOT SOLD SEPARATELY

Fig. 73 - Hydraulic Marine Gear



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	5186176	Coupling, propeller drive shaft (includes bolts, nuts, lockwashers and pin) .....	1	1		
-	-	5122181	Coupling, propeller drive shaft .....			1	
-	-	5124193	Coupling, propeller drive shaft (4.11 and 4.96:1 gear ratios) ....				1
-	-	5124424	Coupling, propeller drive shaft (2.17 and 3.07:1 gear ratios) ....				1
-	-	271637	Bolt, 3/4"-16x2 3/4" hex. hd. ....	8	8		
-	-	273037	Bolt, 7/8"-14x5 1/4" hex. hd. ....	2	2		
-	-	117056	Nut, 1"-14 hex. ....			8	
-	-	121326	Lockwasher, 1" .....			8	
-	-	223784	Bolt, 1"-14x2 3/4" hex. hd. ....			8	
-	-	103326	Lockwasher, 3/4" .....	8	8		
-	-	103327	Lockwasher, 7/8" .....	2	2		
-	-	117054	Nut, 3/4"-16 hex. ....	8	8		
-	-	117055	Nut, 7/8"-14 hex. ....	2	2		
-	-	5170923	Pin, propeller drive shaft coupling .....	1	1		
-	-	5112419	Pump Assy., hydraulic marine gear oil (includes items marked †) .....	1	1		
-	-	5123950	Adaptor, hydraulic marine gear oil pump .....	1	1		
-	-	5157244	Bolt (3/8"-16x1 3/4") .....	2	2		
-	-	186658	Bolt, 3/8"-24x5 1/2" hex. hd. ....	2	2		
-	-	5124093	Stud (3/8"-24x5.78") .....	2	2		

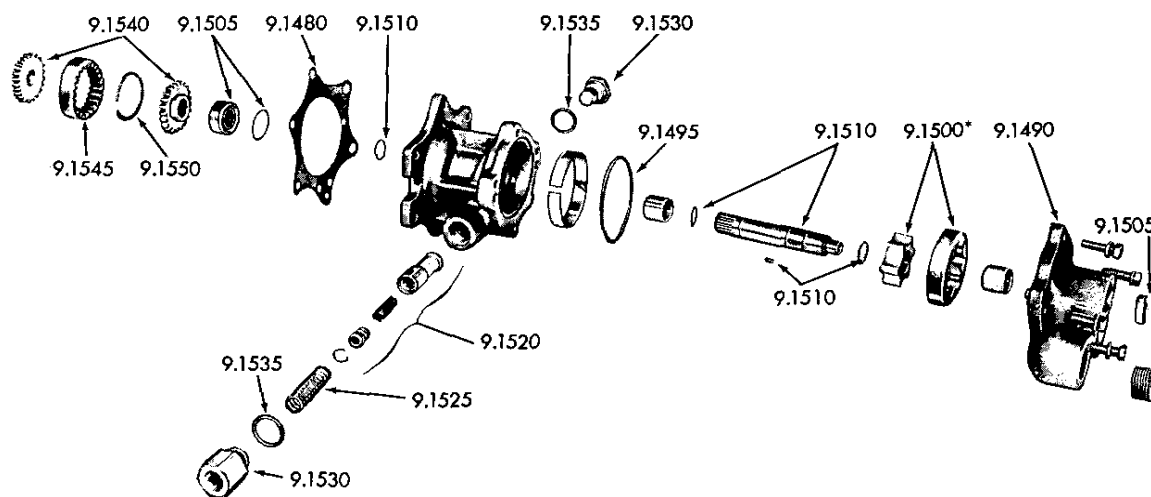


Fig. 74 - Hydraulic Marine Gear Oil Pump

-	-	103321	Lockwasher, 3/8" .....	6	6		
-	-	117049	Nut, 3/8"-24 hex. ....	2	2		
-	-	5122227	Gasket, hydraulic marine gear oil pump adaptor .....	1	1		
74	9.1480	5150057	Gasket, hydraulic marine gear oil pump .....	1	1		
74	9.1490	5194905†	Cover, hydraulic pump (RH engine) .....	1	1		
74	9.1490	5194931†	Cover, hydraulic pump (LH engine) .....	1	1		
74	9.1495	5193135†	Seal, hydraulic pump cover .....	1	1		
74	9.1500	5193145†	Rotor Set, hydraulic pump .....	1	1		
74	9.1505	5196038†	Seal, hydraulic pump oil (.875" dia. shaft) .....	1	1		
74	9.1505	5196039†	Seal, hydraulic pump oil (.625" dia. shaft) .....	1	1		
74	9.1505	5192268†	Gasket, hydraulic pump .....	1	1		
74	9.1510	5194912†	Shaft, hydraulic pump .....	1	1		
74	9.1510	5192273†	Ring, hydraulic pump shaft snap .....	3	3		
74	9.1510	5195199†	Pin, hydraulic pump rotor .....	1	1		
74	9.1520	5195508†	Valve Assy., hydraulic pump .....	1	1		
74	9.1525	5194913†	Spring, hydraulic pump valve flow control .....	1	1		
74	9.1530	5194914†	Screw, hydraulic pump valve .....	1	1		
74	9.1530	5194918†	Adaptor, hydraulic pump valve screw .....	1	1		
74	9.1535	120428†	Gasket, hydraulic pump valve screw (1" copper) .....	2	2		
74	9.1540	5171922	Hub, hydraulic pump drive (pump shaft) .....	1	1		
74	9.1545	5160408	Ring, hydraulic pump drive coupling .....	1	1		

† Part of Pump Assembly.



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
74	9.1550	2070610	Ring, hydraulic pump drive snap .....	1	1		
4	9.1650	5112512	Strainer Assy., oil (includes element) .....	1	1		
-	-	5574252	Element, oil strainer .....	1	1		
33,75	9.1775	5118781	Hose, oil pressure gage (flex.) .....	1	1	1	
-	-	120401	Elbow, 1/8"-90° street .....	1	1		
-	-	141539	Bushing, 1/4" x 1/8" red. pipe .....			1	
-	-	1508350	Fitting, restricted .....	1	1	1	
-	-	5129129	Filter Assy., oil (includes element and cover gasket) .....	1	1		
-	-	5574978	Element, oil filter (includes gasket) .....	1	1		
-	-	5571024	Gasket, oil filter cover .....	1	1		

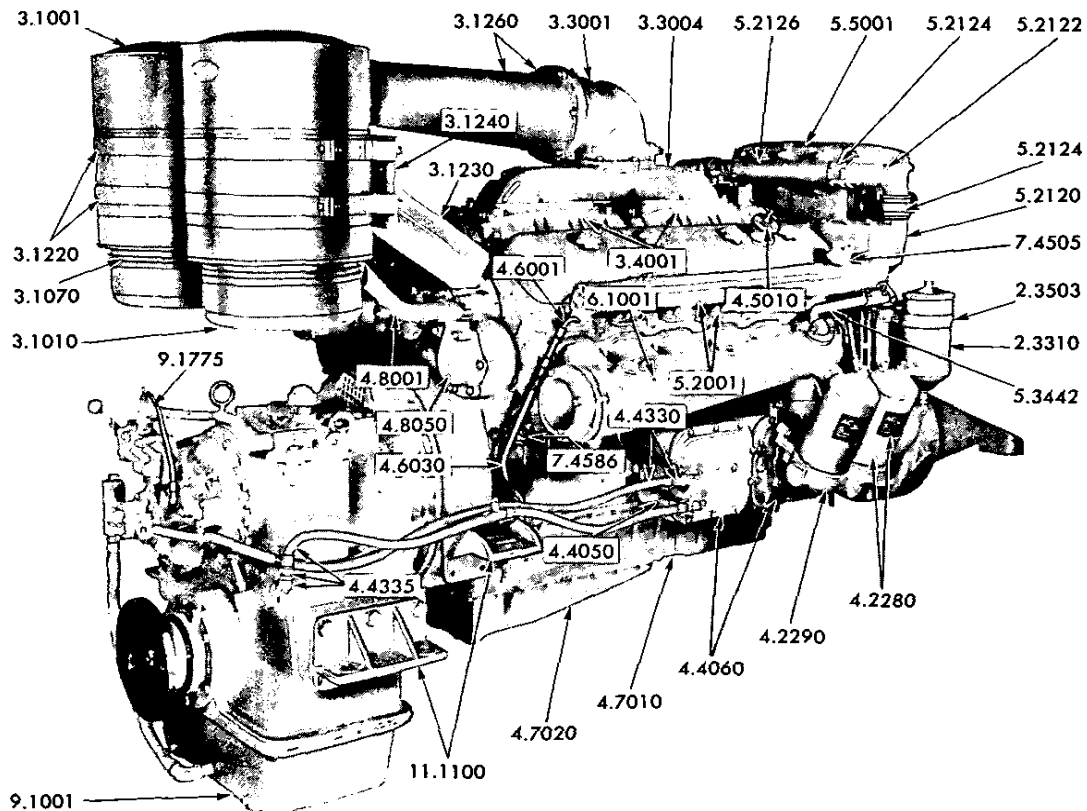


Fig. 75 - Hydraulic Marine Gear

ENGINE HOODS							
62	10.1020	5124643	Hood Assy., radiator (short) .....	1			
62	10.1020	5124644	Hood Assy., radiator (short) .....		1		
-	-	5188167	Shim, radiator hood (.031") (to base) .....	AR	AR		
-	-	5188168	Shim, radiator hood (.062") (to base) .....	AR	AR		
-	-	179816	Bolt, 5/16"-18 x 3/4" hex. hd. ....	10	10		
-	-	181596	Bolt, 5/16"-24 x 7/8" hex. hd. ....	4	4		
-	-	181374	Bolt, 3/8"-24 x 1 1/2" hex. hd. ....	4	4		
-	-	5170971	Washer (3/8") bevel .....	4	4		
-	-	120393	Washer, 5/16" flat .....	14	14		
-	-	103341	Washer, 3/8" flat .....	4	4		



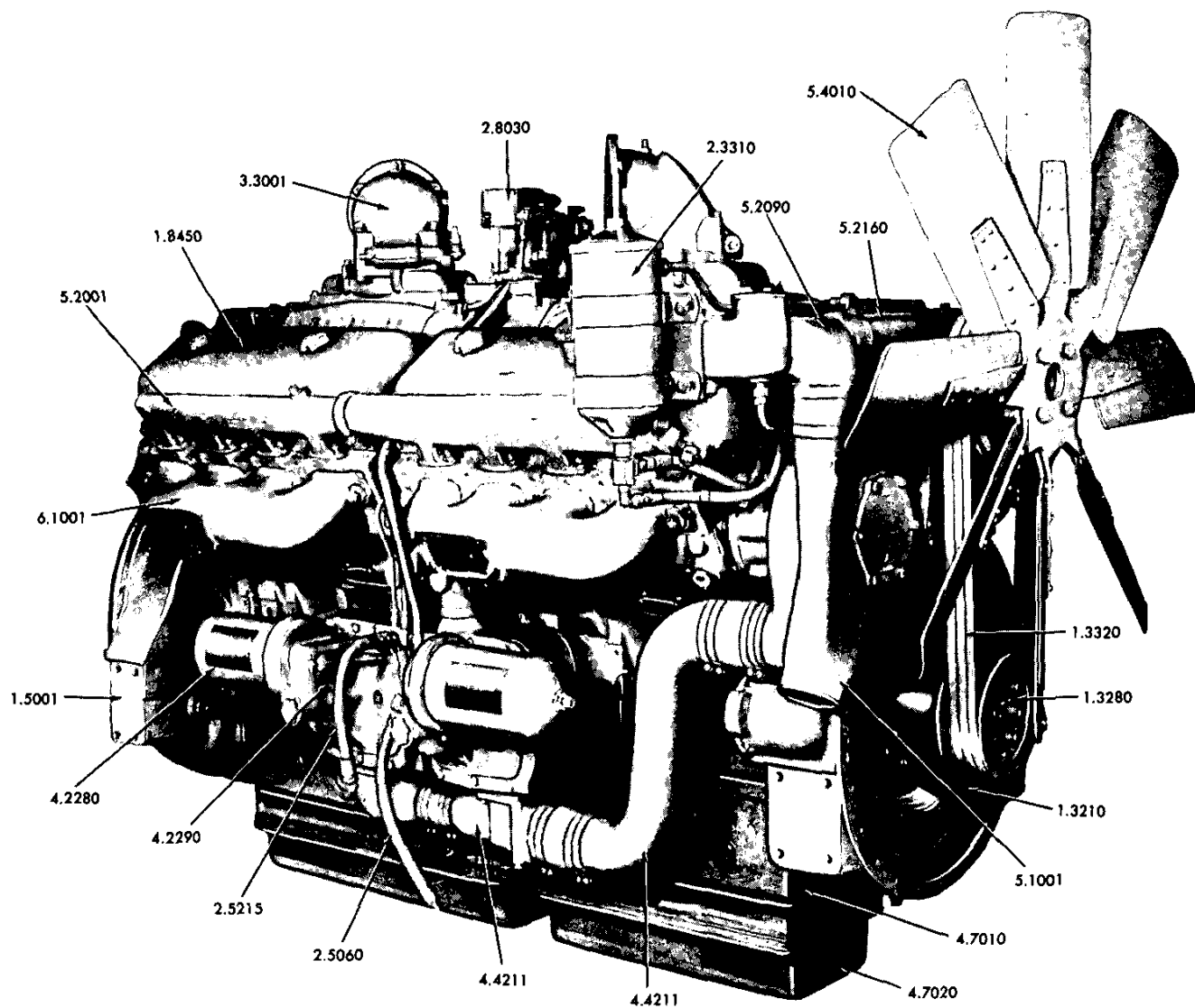


Fig. 76 - 16 V-71 Fan to Flywheel Unit



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	103320	Lockwasher, 5/16" .....	4	4		
-	-	103321	Lockwasher, 3/8" .....	4	4		
-	-	121917	Nut, 5/16"-24 hex. ....	4	4		
-	-	117049	Nut, 3/8"-24 hex. ....	4	4		
<b>ENGINE MOUNTING AND BASE</b>							
The proper base for your engine can be interpreted by your nearest GM Diesel dealer or distributor. Furnish him the model number and type number (if shown) on the Option Plate which is attached to the rocker cover.							
62	11.1001	-	Base .....	1	1	1	
-	-	5170530	Washer, 3/4" bevel .....	AR	AR	AR	
-	-	5125446	Support, engine front .....	1	1		
4	11.1070	5117601	Support, engine front (bracket) .....	2	2		
-	-	5123535	Bracket, engine front support L.H. ....	1	1		
-	-	5123536	Bracket, engine front support R.H. ....	1	1		
33,52	11.1070	5117460	Support, engine front (bracket) .....			2	
-	-	5129840	Support, engine front .....				2
-	-	271561	Bolt, 5/8"-11 x 1 7/8" hex. hd. ....				8
-	-	5168520	Washer, 5/8" bevel .....	AR	AR	AR	
-	-	2373274	Insulator Assy., engine front support .....	1	1		
-	-	5124152	Spacer, engine front support .....			2	
-	-	5168520	Washer, 5/8" bevel .....			2	
3	11.1088	5122294	Trunnion, engine front .....	1	1		
21	11.1090	5179360	Support Assy., engine front trunnion mounting (includes bolts and lockwashers) .....	1	1		
-	-	454947	Bolt, 7/16"-14 x 2 1/4" hex. hd. ....	2	2		
-	-	103322	Lockwasher, 7/16" .....	2	2		
-	-	5179345	Ring, engine front trunnion mounting support cushion .....	1	1		
62	11.1100	5124592	Support, engine rear (to base) .....	2	2		
4	11.1100	5117620	Support, marine gear .....	1	1		
4	11.1100	5167557	Bracket, engine rear support .....	1	1		
62	11.1100	5123803	Support, engine rear (to base) .....			2	
-	-	5129840	Support, engine rear .....				2
33	11.1100	5117528	Bracket, marine gear support R.H. ....			1	
33	11.1100	5117531	Bracket, marine gear support L.H. ....			1	
33,75	11.1100	5117533	Bracket, engine rear support .....			2	
33,75	11.1100	5126665	Bracket, marine gear support .....			2	
-	-	5124648	Bracket, marine gear support R.H. ....				1
-	-	5124649	Bracket, marine gear support L.H. ....				1
<b>BILGE PUMP</b>							
-	-	5169979	Pump Assy., bilge (for right bank) ..	1	1	1	
-	-	5168716	Pump Assy., bilge (for left bank) ..	1	1	1	
77	12.2001	179884	Bolt, 1/2"-13 x 1 3/8" hex. hd. ....	2	2	2	
77	12.2001	103323	Lockwasher, 1/2" .....	2	2	2	
77	12.2020	5190446	Stud, bilge pump body .....	6	6	6	
77	12.2030	5164528	Gasket Set, bilge pump body (includes one each .005" and .010" thick gaskets) .....	1	1	1	
77	12.2040	5190464	Impeller and Shaft Assy., bilge pump (includes pin) .....	1	1	1	
-	-	5190442	Pin .....	1	1	1	
77	12.2050	134519	Draincock, 1/8" .....	1	1	1	
77	12.2060	5160375	Packing, bilge pump shaft .....	4	4	4	
-	-	5190476	Packing, bilge pump shaft .....	1	1	1	
77	12.2070	5190439	Gland, bilge pump shaft packing .....	1	1	1	
77	12.2070	5190452	Lock .....	1	1	1	
77	12.2070	122002	Nut, 5/16"-24 hex. brass .....	2	2	2	
-	-	5190444	Stud, bilge pump shaft packing gland .....	2	2	2	
77	12.2090	5164453	Bushing, bilge pump shaft .....	1	1	1	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
77	12.2100	954143	Bearing, bilge pump shaft .....	1	1	1	
77	12.2110	5190443	Shim, bilge pump shaft bearing (.005") .....	1	1	1	
77	12.2130	5190441	Cup, bilge pump grease .....	1	1	1	
77	12.2140	5190447	Pulley Assy., bilge pump driven .....	1	1	1	
77	12.2140	5190450	Lock .....	2	2	2	
77	12.2140	124546	Key, 5/32"x5/8" woodruff .....	1	1	1	
77	12.2140	114351	Bolt, 1/4"-20x3/8" fil. hd. ....	2	2	2	
-	-	5118199	Belt, bilge pump drive (endless) .....	1	1	1	
-	-	5170041	Belt, bilge pump drive (jointed) .....	1	1	1	
-	-	5167333	Connector, bilge pump priming tube .....	2	2	2	
-	-	5172519	Hose, bilge pump priming .....	1	1	1	

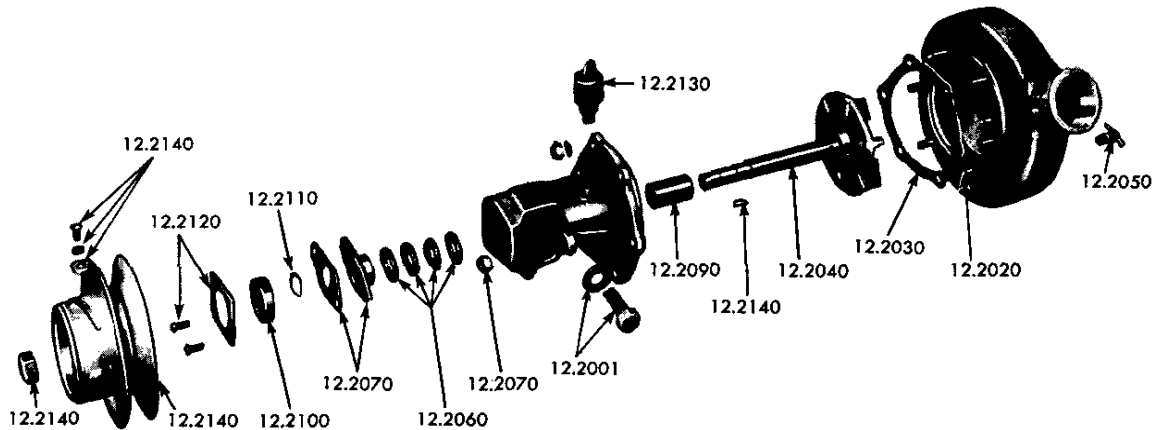


Fig. 77 - Bilge Pump

AIR COMPRESSOR							
The proper air compressor assembly and tube assemblies can be interpreted by your GM Diesel dealer or distributor. Furnish him the type number shown on the Option Plate.							
3,78	12.4001	-	Compressor Assy. (7 1/4 CFM) (belt driven) .....	1	1	1	
3,78	12.4001	-	Compressor Assy. (12 CFM) (belt driven) .....	1	1	1	
-	-	-	Compressor Assy. (12 CFM) (flange mounted) .....		1		
-	-	118536	Draincock, 3/8" .....	1	1	1	
-	-	179879	Bolt, 7/16"-14x1" hex. hd. ....	4	4	4	
-	-	179884	Bolt, 1/2"-13x1 3/8" hex. hd. ....		4		
-	-	103322	Lockwasher, 7/16" .....	4	4	4	
-	-	103323	Lockwasher, 1/2" .....		4		
3,78	12.4015	5117740	Pulley, air compressor .....	1	1	1	
78	12.4015	103885	Pin, 1/8"x1" cotter .....	1	1	1	
79	12.4025	5110761	Gasket, air compressor adaptor .....	1	1	1	1
79	12.4037	2136944	Plate, air compressor drive .....	1	1		
79	12.4037	5119920	Bolt, air compressor drive .....	4	4	4	
79	12.4040	2136945	Hub, air compressor drive .....	1	1	1	
-	-	103375	Pin, 3/32"x1 1/4" cotter .....	1	1	1	
3,78	12.4045	5126405	Belt, air compressor drive .....	1	1	1	
79	12.4050	2136946	Coupling, air compressor drive .....		1		
78	12.4065	-	Tube Assy., air compressor lube oil supply .....	1	1	1	
-	-	116453	Elbow, 1/4" fl. tube 90° .....	1	1	1	
-	-	118753	Elbow, 1/4" fl. tube 90° .....		1		
-	-	189060	Bushing, 3/4"x1/4" red. pipe .....	1	1	1	
78	12.4070	-	Tube Assy., air compressor drain .....	1	1	1	
78	12.4070	444004	Adaptor, 1/2" pipe .....	1	1	1	
-	-	109429	Elbow, 5/8" fl. tube 90° .....	1	1	1	
3,78	12.4085	-	Tube Assy., air compressor water inlet .....	1	1	1	
3,78	12.4085	118757	Elbow, 3/8" fl. tube 90° .....	1	1	1	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
3,78	12.4090	-	Tube Assy., air compressor water outlet .....	1	1	1	
78	12.4090	142767	Bushing, 3/4" x 3/8" red. pipe .....	1	1	1	
3,78	12.4090	111316	Elbow, 3/8" street 90° .....	1	1	1	

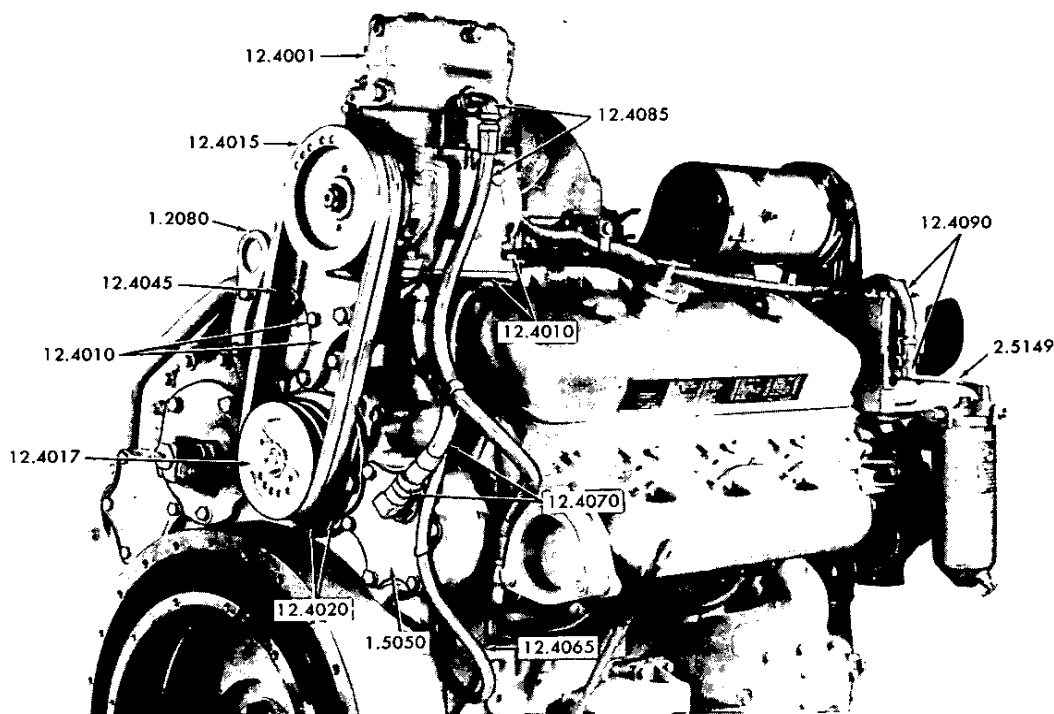


Fig. 78 - Typical Air Compressor Installation

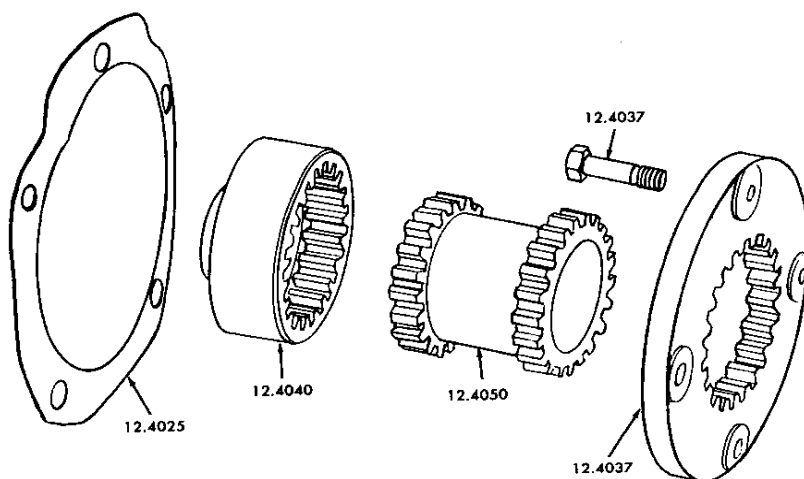


Fig. 79 - Air Compressor Drive



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
-	-	9402826	Elbow, 3/8" fl. tube 45° .....	1	1	1	
-	-	2325715	Elbow, 1/2"x90° .....		1		
-	-	-	Tube Assy., air compressor booster inlet (hose) .....	1	1	1	
-	-	5189769	Flange (elbow) air compressor booster inlet tube .....	1	1	1	
-	-	5186840	Clamp, air compressor booster inlet hose .....	1	1	1	
-	-	5181801	Elbow, air compressor booster inlet tube .....	1	1	1	
-	-	179816	Bolt, 5/16"-18x3/4" hex. hd. ....	2	2	2	
-	-	103320	Lockwasher, 5/16" .....	2	2	2	
<b>HYDRAULIC PUMP</b>							
80	12.5001	5184292	Pump Assy., hydraulic (13 GPM at 2000 RPM, C.W. rotation) ....	1	1	1	
80	12.5001	5184293	Pump Assy., hydraulic (13 GPM at 2000 RPM, C.C.W. rotation) ..	1	1	1	
80	12.5001	5127918	Pump Assy., hydraulic (5 GPM at 1200 RPM, C.W. rotation) .....		1		
80	12.5001	5129051	Pump Assy., hydraulic (5 GPM at 1200 RPM, C.C.W. rotation) ....		1		
80	12.5005	5168852	Gasket, hydraulic pump (between pump and adaptor) .....	1	1	1	
80	12.5010	3292492	Coupling, hydraulic pump drive .....	1	1	1	
80	12.5015	5153449	Plate, hydraulic pump drive .....	1	1	1	
80	12.5015	5177026	Spacer, hydraulic pump drive .....	1	1	1	
80	12.5015	5176474	Bolt, hydraulic pump drive plate .....	4	4	4	
80	12.5020	5123814	Adaptor, hydraulic pump .....	1	1	1	
80	12.5020	179839	Bolt, 3/8"-16x1" hex. hd. ....	6	6	6	
80	12.5020	103321	Lockwasher, 3/8" .....	6	6	6	
80	12.5021	5110761	Gasket, hydraulic pump adaptor .....	1	1	1	
80	12.5030	5168688	Gear, hydraulic pump drive .....	1	1	1	
-	-	103907	Key, 3/16"x7/8" woodruff .....	1	1	1	

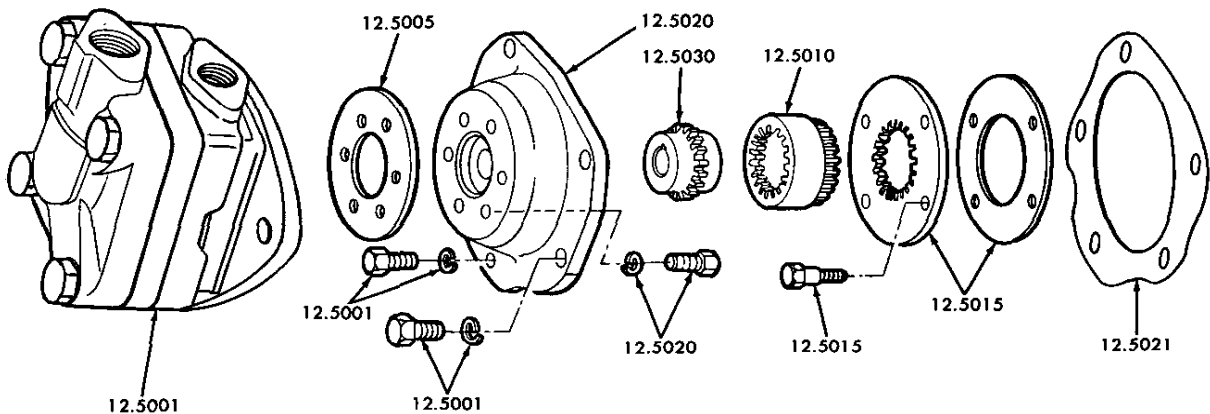


Fig. 80 - Hydraulic Pump and Drive

<b>COLD WEATHER STARTING AIDS</b>							
-	-	5193474	Starting Aid Kit, cold weather (capsule type) (includes items below)	1	1	1	
81	12.6305	5230535	Pump Assy., starting aid (includes indented items) .....	1	1	1	
-	-	5230543	Seal Ring, starting aid pump plunger .....	2	2	2	
81	12.6330	5152674	Knob, starting aid pump plunger .....	1	1	1	
81	12.6330	122366	Nut, 5/8"-18 hex. ....	1	1	1	
81	12.6340	5230544	Valve, starting pump inlet (1/2 lb.) .....	1	1	1	



# GM DIESEL

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
81	12.6345	5153358	Valve, starting pump outlet (30 lb.) .....	1	1	1	
-	-	5174649	Tube, starting aid pump to nozzle (1/8" dia. x 7") .....	1	1	1	
-	-	140303	Elbow, 1/8" ball sleeve tube 90° .....	1	1	1	
-	-	140323	Elbow, 1/8" ball sleeve tube 90° int., ext. P.T. ....	2	2	2	
-	-	121322	Sleeve, 1/8" ball tube .....	3	3	3	
-	-	121220	Nut, 1/8" ball sleeve tube .....	3	3	3	
-	-	2185536	Nozzle, starting aid pump tube .....	1	1	1	
81	12.6380	5186071	Puncturing Tool Assy., starting fluid capsule (includes indented items)	1	1	1	
81	12.6385	5192816	Strainer and Plug Assy., starting fluid (includes next 2 items) ....	1	1	1	
-	-	5192818	Strainer .....	1	1	1	
-	-	142858	Screw, 1/4"-20 x 1/4" rd. hd. sl. ....	1	1	1	
-	-	5192819	Gasket, starting fluid strainer assy. ....	1	1	1	

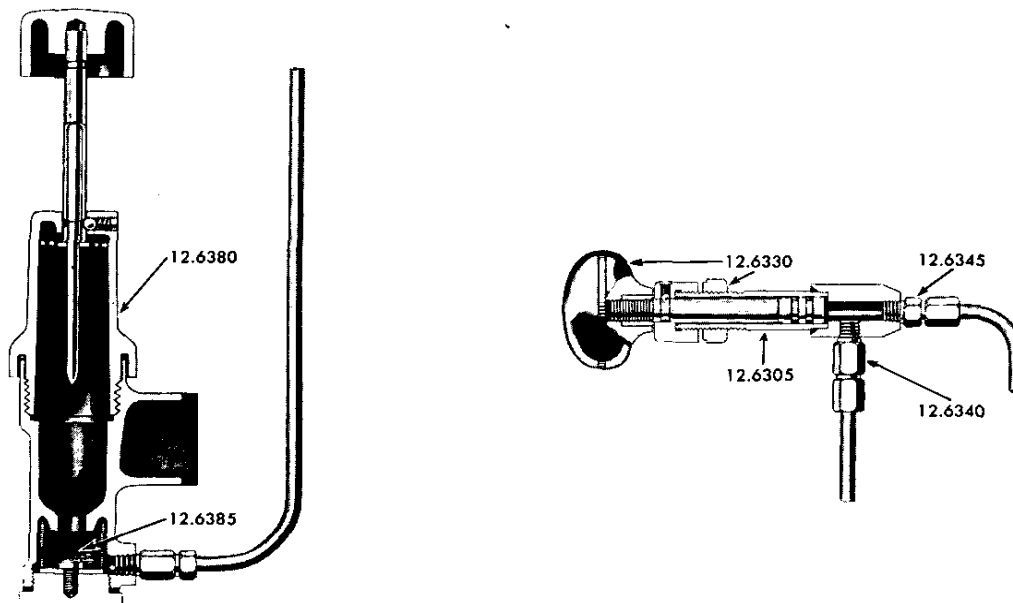


Fig. 81 - Cold Weather Starting Aid

HYDRAULIC STARTER							
-	-	6505065	Starter Assy., hydraulic (R.H. engine rotation) .....	1	1		
-	-	5125121	Starter Assy., hydraulic (R.H. engine rotation) .....			1	
-	-	5125122	Starter Assy., hydraulic (L.H. engine rotation) .....			1	
-	-	273666	Bolt, 5/8"-11 x 1 3/8" 12 pt. hd. ....	1	1	1	
-	-	426449	Bolt, 5/8"-11 x 1 5/8" .....	2	2	2	
-	-	103325	Lockwasher, 5/8" .....	3	3	3	
-	-	5172492	Gasket .....	1	1	1	
-	-	6505001	Reservoir Assy., hydraulic starter (includes indented items) .....	1	1	1	
-	-	6505024	Reservoir Assy., hydraulic starter (includes indented items) .....			1	
-	-	5120380	Decal, reservoir .....	1	1	1	
-	-	1553180	Cap, hydraulic starter reservoir .....	1	1	1	
-	-	6505020	Filter Assy., hydraulic starter reservoir .....	1	1	1	
-	-	5125522	Accumulator Assy., hydraulic starter (2 1/4 gal., 34 1/2" L.) ..	1	1	1	
-	-	6505012	Gage, hydraulic starter pressure .....	1	1	1	
-	-	5125466	Pump Assy., hydraulic starter engine driven .....	1	1	1	
-	-	6525073	Plate, hydraulic starter engine pump drive .....	1	1	1	
-	-	6505002	Pump Assy., hydraulic starter hand .....	1	1	1	
-	-	5110760	Primer, fuel .....	1	1	1	



# G M D I E S E L

FIG. NO.	ITEM NO.	PART NO.	NAME AND DESCRIPTION	QUANTITY PER			
				6	8	12	16
HYDRAULIC STARTER ACCESSORIES							
-	-	854453	Filter Assy., hydraulic starter (includes adaptor and element) .....	1	1	1	
-	-	5120375	Adaptor (1/4" x 1/8" red. pipe) filter .....	2	2	2	
-	-	854454	Element, hydraulic starter filter .....	1	1	1	
-	-	5196520	Starting Kit, remote (includes parts necessary to install remote control for engines having hydraulic starters) .....	AR	AR	AR	
-	-	5193720	Fitting Kit, hydraulic starter (includes necessary fittings for make-up of complete hose assemblies together with clips, bolts, lockwashers and nuts) .....	AR	AR	AR	
-	-	5115727	Hose, hydraulic starter reservoir to filter (3/8" I.D. x 26" L.) .....	1			
-	-	5118397	Hose, hydraulic starter reservoir to filter (3/8" I.D. x 14 1/2" L.)..		1	1	
-	-	5115721	Hose, hydraulic starter filter to engine pump (3/8" I.D. x 17" L.) .....	1			
-	-	5115727	Hose, hydraulic starter filter to engine pump (3/8" I.D. x 26" L.) .....		1		
-	-	5115732	Hose, hydraulic starter filter to engine pump (3/8" I.D. x 43" L.) .....			1	
-	-	5118397	Hose, hydraulic starter filter to hand pump (3/8" I.D. x 14 1/2" L.) .....	1	1		
-	-	5118396	Hose, hydraulic starter filter to hand pump (3/8" I.D. x 10" L.) .....			1	
-	-	5124192	Tube Assy., hydraulic starter engine pump to accumulator (flex. 1/4" I.D. x 49 1/2" L.) .....	1	1		
-	-	5113193	Tube Assy., hydraulic starter engine pump to accumulator (flex. 1/4" I.D. x 48 7/32" L.) .....			1	
-	-	5120101	Tube Assy., hydraulic starter hand pump to accumulator (flex. 1/4" I.D. x 21 7/32" L.) .....	1	1		
-	-	5126901	Tube Assy., hydraulic starter hand pump to accumulator (flex. 1/4" I.D. x 25 7/32" L.) .....			1	
-	-	5115713	Tube Assy., hydraulic starter accumulator to starter (flex. 3/8" I.D. x 40 5/32" L.) .....	1	1	1	
-	-	5118398	Hose, hydraulic starter to reservoir (5/8" I.D. x 10" L.) .....	1			
-	-	5189470	Hose, hydraulic starter to reservoir (5/8" I.D. x 15" L.) .....		1		
-	-	5127093	Hose, hydraulic starter to reservoir (3/4" I.D. x 30" L.) .....			1	
-	-	5180056	Hose, hydraulic starter engine pump to reservoir (1/4" I.D. x 38" L.) .....	1			
-	-	5113686	Hose, hydraulic starter engine pump to reservoir (1/4" I.D. x 44" L.) .....		1		
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-	-	5194974	Paint, engine touch-up (12 oz., spray can, Alpine Green) .....	AR	AR	AR	AR
-	-	5166164	Wire, injector spray tip cleaning (5' length, .006") .....	AR	AR	AR	AR



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## **DETROIT DIESEL ENGINE DIVISION**

**GENERAL MOTORS CORPORATION ■ 13400 West Outer Drive Detroit, Michigan, 48228**  
**IN CANADA GENERAL MOTORS DIESEL LIMITED ■ LONDON, ONTARIO**

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